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American Artisan

and

Hardware Record

Sheet Metal - Roofing - Warm Air Furnaces - Stoves

Vol. 88. No. 20

CHICAGO, NOVEMBER 15, 1924

\$2.00 Per Year

Success

THOSE prospects that have been
"hanging fire" should be sold now.

Folks who want a heating plant
want and are ready to buy the best
quality.

You can fill your present needs to
the utmost with Success Heaters.

Write for complete catalog today.

Heaters

Success
for
1925

AND right at this
time you should
anticipate your require-
ments for the coming
big business year.

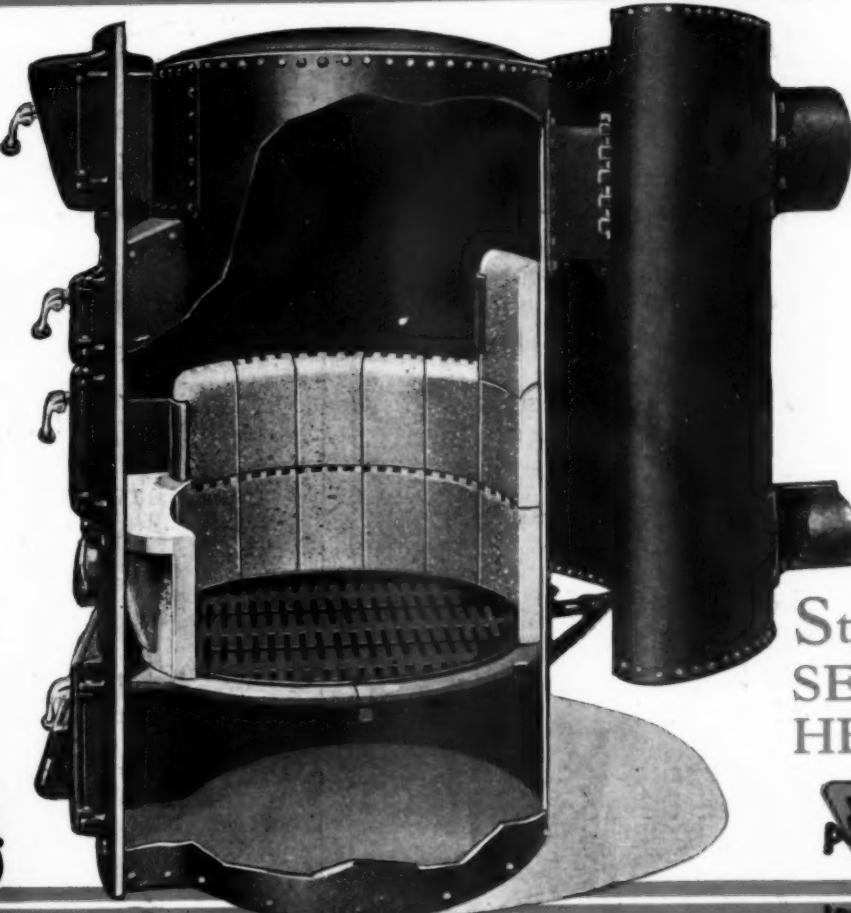
Success heaters will
help you make a suc-
cessful year.

Every Success Heater
measures up to the
highest standards of
quality and scientific
design.

Every Success Heater
gives successful service.

The line is complete—
a type and size for every
requirement.

Let us help you make
successful plans for
next year.



Standard
SERVICE
HEATER



Success Heater Manufacturing Company
Des Moines, Iowa



Get set for Big Business

ALL indications point to a period of sound prosperity. Your business should take a step or two ahead right now.

The best way to take a safe step in a forward direction is to take on a *better* furnace—a furnace that sells at all times.

The Weir is the furnace that will more than meet your customers' demands for high quality, reliability and long service.

Write today for agency details on the Weir for your territory.

Get set for Big Business!

The MEYER FURNACE Co.
Peoria, Illinois



Fuel and Furnaces

THEY are inseparable. One needs the other or each is useless.

The relationship of this company to its dealers is as close as Fuel and Furnaces.

Our product and your placing of it are cemented by a mutual interest to sell Niagara Furnaces to every possible user in your territory.

We have ways of helping you about which we would like to tell you.

*Write or wire us for
our Special Dealer Partner-
ship Plan.*

**THE FOREST CITY FOUNDRY
& MANUFACTURING COMPANY**
1220 Main Avenue Cleveland, Ohio
Also Manufacturers of Monarch and Peerless Furnaces

Published to Serve
the
Warm Air Furnace
Sheet Metal, Stove
and
Hardware Interests

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SERVING OUR SUBSCRIBERS

Service speaks louder than words.

On page 22 of last week's issue of AMERICAN ARTISAN AND HARDWARE RECORD there appeared an answer to an inquiry from J. P. Reinhardt, Bowling Green, Kentucky, on how to make a "Y" furnace connection.

In the issue of October 25th there appeared a reply to an inquiry of Howard J. Corbett, Pontiac, Michigan, for a raking gab'e mould.

Here are only two of the many hundreds of inquiries which come to and are answered by AMERICAN ARTISAN AND HARDWARE RECORD for its subscribers.

Our aim is at all times to render that service which will be of the greatest benefit to our subscribers and consequently to the entire Sheet Metal and Warm Air Furnace industries.

Have you a vexing problem that is blocking your progress? Send it to us.

Have you some statement of general concern you wish to make in the interests of the trade you represent? Send it in. Publication of your name will be withheld if you so desire.

If Wilder Metal Withstands Damp Salt Air 7 Years, How Long Will It Stand Up in Your Service?



Some of the Known Uses of Wilder Metal



Roofing
Siding
Gutters
Cornice
Stacks
Smoke Pipes
Stove Linings
Refrigerators
Ventilators
Steam Tables
Furnaces
Ice Cans
Silos
Cisterns
Culverts
Skylights

What Do You Make That Requires Extra Rust Resistance at Low Cost?

*Read What
Ed. Fogg of Pen-
sacola, says:*

"In 1915 I received twelve sheets of your products, which we used as roofing on a garage. After seven years of service the material is still in good condition, showing no signs of rust or deterioration.

"In this climate that means a good deal, as the damp salt air will ruin most any ordinary roofing in about three years."

ED. FOGG,
316 W. Strong St.,
Pensacola, Fla.

Wilder Metal is a superior coated sheet, prepared by a patented hot-dipping process at an exceptionally high temperature, and using in the alloy a special aluminum composition which renders the sheet highly resistant to corrosion. May we send samples for test purposes?

THE WILDER METAL CO.
NILES, OHIO

WILDER-METAL
defies rust
SHEETS, STAMPED and FORMED PARTS, PROCESSING, etc.

To Render a Real Service Is a Great Thing, But Willingness Is Not Enough.



PUBLISHED TO SERVE" are the three first words found on the title page of American Artisan, and they are intended to mean exactly what they say.

If conditions in the furnace and sheet metal industries were ideal and if there were no probability that these conditions would ever become less ideal, there might be a question as to whether any service, such as American Artisan has been rendering, would be of any value.

But as conditions in these two great industries are far from being ideal there is also a very distinct need for such a service, and the publishers of American Artisan are glad to continue in the work of improving these conditions.

Take for example the case of the subscriber who, in a recent letter, criticized the furnace manufacturers in general for failure to make and sell furnaces at a price that would make it possible for him to compete on a price basis, without regard to any other factor in the installation.

That man is in actual need of information and instruction in the fundamentals of selling as applied to his own business—

And that information and instruction is only one of the features of each issue of American Artisan.

Or take the sheet metal contractor who says to himself, "If Smith can do this job for \$165.00 and make money, I can shave my profit a little and do it for \$158.00."

He is trying to do business on the basis of "the other fellow's" figures, which is a dangerous thing to do, and here again American Artisan steps in with the information as to methods of estimating and the necessity for inclusion of all items of costs as well as of a fair margin of profit in the estimate.

Or take the furnace installer who is having

trouble with a warm air heating plant that he has put in. He has tried all sorts of stunts to make it work and still it balks.

He comes to American Artisan and through our columns his problem is presented to thousands of installers, from some one of which he receives the proper solution.

"Published to Serve" is not merely a statement—it is a fact. Those who write the editorials, the technical articles, the merchandising articles, the answers to queries, the market news, have one idea before them in their writing:

"How can the information contained in this article be presented so as to be of the greatest possible value to our subscribers?"

There was a time—no so very many years ago—when considerable difficulty was experienced by our editorial department in securing the sort of material that we felt we should have in order to make our publication of real value to our subscribers.

That condition does not obtain today. Contributions are coming in at such a rate that they must often wait their turn for several weeks before space can be found for their publication.

And we take this as an indication that many men engaged in the sheet metal and furnace business are finding American Artisan a ready medium for the exchange of information and ideas and a reliable source of data pertaining to their business.

In that capacity and for that express purpose American Artisan had its inception some forty odd years ago, and to that aim it has and will adhere.

* * *

In your relations with your competitors—fellow business men is the terms we prefer—make the least of your differences and the most of your common interests.

Random Notes and Sketches.

By Sidney Arnold

One of the most common remarks on the part of a large body of salesmen is, "I have no trouble in making the approach, analyzing and demonstrating my goods, but I cannot close the deal." And these same salesmen will tell you that closing the deal is their only trouble and their only failure. The fact is, it is the last of a series of failures—the climax of their failures.

Closing the deal is no sense independent of all that has preceded. It is not isolated from the rest of the process, so that one may or may not have succeeded in the presentation and may still succeed in closing the deal. The scientific salesman closes the deal before he closes it, and the bungling salesman loses the sale long before he fails to close it.

He lost it in the various steps of his sales movement, just where the other man won it. The only place where he registered his failure was at the close, but, as a matter of fact, it was registered all the way along.

—SALESLOGY.

* * *

Dick Wiechert, of the St. Clair Foundry Corporation, had been planning for a long time on attending the foundrymen's convention, which was held a short time ago in Milwaukee, but found at the last moment that he couldn't go, much to his regret.

But he was not forgotten by his friends from Belleville and St. Louis who did go, for he received post cards from all of them telling of the fine time they were having in Louis Kuehn's town.

He was somewhat astounded, however, when on one of them he read:

"Mrs. (name deleted by censor) not with me, having a splendid time."

* * *

My congenial friend, "Trow" Warner, who is humorously called the "Tee" of the TeeBee combina-

tion and who looks after the Tuttle & Bailey interests in the town with the "Great White Way" where men are men and all that sort of rot, came in to see me this week. Following his departure, the office girls stampeded me with inquiries about who the "cute little fellow" was.

Invest Your Dollars!

Approaching Yule Tide surrounds you with an atmosphere of happiness, while your cheeks glow with the ruddiness of perfect health.

Many there are, however, whose cheeks have ceased to glow and to whom Christmas means only so many hours of torture and depression.

Your enrollment in the Red Cross added to that of others will lift many a drooping head and renew life in many a tubercular body.

Join the Red Cross now. Let your dollars help those who have stumbled by the wayside.

Although comparatively slight of stature, Mr. Warner looked exceedingly prosperous in his spiffy campus togs and that joyous bath we gave him a while back.

* * *

I suppose Harry Frye will be very much chagrined to learn that even the printers who set up the type for AMERICAN ARTISAN have cast their lot with and have placed their sympathies under the banner of Mr. Harrison, of Kenilworth. These printers, all good men and true, seem to think that Mr. Harrison has the best of the argument.

But cheer up Mr. Frye, even the printers think well enough of your "stuff" to read it.

* * *

Charles Merritt of the Forest City Foundry & Manufacturing Company 1220 Main Avenue, Cleveland, Ohio, makers of the Niagara, Monarch and Peerless furnaces, came in to say "Hello."

Mr. Merrit expressed a hope that all who could possibly do so would attend the Research Residence dedication exercises at Urbana, Illinois, December 2.

* * *

My friend, Travers Daniel, Jr., Grand Rapids, Michigan, who sells GiltEdge furnaces, has always had a reputation for reading nothing but the "high browist" of "high brow" literature. But his librarian evidently put one over on him recently, because he told me the following story the other day:

Bell Hop—"Did you ring, sir?"

Guest (after ringing for ten minutes)—"Hell, no. I was only tolling, as I thought you were dead."

* * *

In the "Factory Bulletin," which is published monthly by and for the employees of the International Heater Company, I found the following poem that has a lot of real stuff in it for the man who wants to get ahead, but who is inclined to put things off:

A Magic Word.

There's a little word below, with letters three,
Which, if you only grasp its potency,

Will send you higher
Towards the goal where you aspire,
Which, without its precious aid
you'll never see—
NOW!

Success attends the man who views it right;
Its back and forward meanings differ quite;
For this is how it reads
To the man of ready deeds,
Who spells it backward from achievement's height—
WON!

Millersburg, Ohio, Installer Stages Warm Air Furnace Exhibit at Free Fair Recently.

Cliff Kaser & Son Take Advantage of Opportunity to Give Business Greater Publicity.

IN EVERY industry there are some members who are mere hangers-on-men who know and do just enough to keep them going, or whom circumstance has in some peculiar way favored. These men are not the doers of the industry; they rely upon the progressive ones to pioneer the way—to blaze the trail.

Among those who are blazing the trail to better publicity for the warm air heating industry—who are doing their utmost to take advantage

a warm air furnace to owners of them.

The fair also gave them a good chance to line up prospects upon whom they could call later.

Cliff Kaser makes the following remarks:

To AMERICAN ARTISAN:

During the three days of the fair, we booked nineteen lively prospects, and they are still coming in. We are having inquiries from quite a distance.



Booth of Cliff Kaser & Son, Millersburg, Ohio, During Recent Fair Week Held in That City.

of every opportunity to get their products into public view is Cliff Kaser & Son, sheet metal workers at Millersburg, Ohio, installers of the Torrid Zone furnaces, manufactured by the Lennox Furnace Company, Marshalltown, Iowa.

They had a 3-day fair down at Millersburg, Ohio, not long ago and Cliff Kaser & Son were on the job with a furnace exhibit.

During the fair week many individuals turned out, the farmers came to town, which gave Cliff Kaser & Son a good chance to talk warm air furnace to many prospective buyers—in truth, to convert a lot of those who knew nothing about

Our town is the county seat of Holmes county, which is a sparsely settled county. Millersburg has less than 2,500 population. We have prospects in the surrounding counties of Wayne, Stark, Summit, Coshocton and Knox. Also we have had several church committees look us up as a result of our display.

We have closed two contracts that resulted from the exhibit, and have several more on the string that we feel sure of getting. The indications are that we will reap a good harvest in the near future because of the publicity given our goods and firm.

During the week of the fair and

the week following the official county paper carried our advertisements which were furnished in plate form by the manufacturers.

The white sheet, hanging in the upper left-hand corner of the illustration shown herewith, is a list of all the purchasers of Torrid Zone furnaces in our territory. This attracted a great deal of attention and one member of our staff on duty at the exhibit was kept busy nearly all the time explaining the merits and workings of the furnace.

Of that list of prospects, which we obtained from the Torrid Zone furnace purchaser, every one is really in the market for a furnace. Not every one who stopped to look and ask questions was an immediate furnace prospect, but they all hold promise for the future. In other words, our live prospect list was selected with extreme care.

During the fair we distributed about 1,500 pamphlets, besides some catalogs, and gave the kiddies 500 spinning tops.

We trust that this article will help some brother furnace installer to see the light concerning publicity.

Yours truly,
CLIFF KASER & SON,
By Cliff Kaser.

Millersburg, Ohio.

* * *

By making this display the firm has shown the proper spirit in trying to get wholesome publicity for its products. It would also be a safe wager to say that the officials of the company were instrumental in staging the fair.

Such men do things. It may be in a small way, but the principle is the same as if it were done on a bigger scale. The results in increased business are the same and needless to say they are gratifying.

In order to sell warm air furnaces, the installer and manufacturer have got to get the public acquainted with their products. They have got to show them that a warm air furnace is better able to give them the type of heat recommended by physicians as most healthful than the products of their competitors, and in order to do this as econom-

ically as possible the installer must create ways of getting large numbers of people together, or to be Johnny on the spot when circumstance brings opportunity their way.

New and Valuable Furnace Data Included in Bridge-Beach Catalog.

The Bridge & Beach Manufacturing Company, 4204 North Union Boulevard, St. Louis, Missouri, makers of Bridge-Beach stoves, ranges, furnaces and humidifiers, have issued their new furnace catalog No. 87-F. A postal card will bring it to your desk.

The book is 8½x11 inches, containing thirty-four pages.

The front cover is finished in a soft, gray tone, very pleasing, while the letters "Bridge-Beach Furnaces"

and the well known Bridge-Beach trade mark are artistically embossed in red upon it.

Bridge-Beach pipe and pipeless furnaces, school room heaters and repair parts make up the main content of the catalog.

The representations of Bridge-Beach products are clearly shown on a good grade of paper stock. The type sizes and illustrations are well selected.

A digest of the national code for designing and installing furnace heating systems is included, with price lists and other valuable data.

The last two pages of the catalog are given over to illustrating the advertising cuts or electrotypes furnished free of charge to Bridge & Beach customers. A selection of twelve illustrations are shown, covering pipe and pipeless furnaces.

Some of the Things That Go to Make a Furnace Installer More Prosperous.

Lauriston Points Out Some Things to Do and Some Things to Avoid in Search for Success in Furnace Business.

IN ONE of the recent issues of the *Michigan Tradesman*, Victor Lauriston, an authority on retail selling, has an article on "The Art of Selling Hot Air Furnaces," which contains considerable instructive information for the furnace installer salesman.

We quote in part:

It pays to know your business thoroughly. Knowledge of the article you are selling is at the root of all successful salesmanship.

The writer was recently in the office of a real estate dealer who makes a business of building houses for sale, and there overheard the dealer explaining to a prospective customer the merits of a certain house. Every important detail of construction was stressed, and particular emphasis was laid upon the fact that the house was warmly built.

It was a very interesting talk. Afterward, I asked whether he usually took that much trouble with every customer.

He answered that he always made it a point to explain every feature of convenience or superiority of construction in his houses. In fact, his customers seemed to be quite as much influenced by these details as by the matters of price and location. And he has sold a lot of houses and made well on them.

The instance reminded me how essential to any salesman was a thorough knowledge of everything pertaining to the article he had to sell.

Now, this same principle of knowing the goods is entirely applicable in the selling of hot air furnaces. A manufacturer in this line tells me he was once calling on a furnace dealer located in a Pacific Coast town. The dealer was handling a furnace that did not seem at all suitable for the fuel used in that locality and which did not appear to possess any special features to commend it to the people of the place. Notwithstanding this apparent handicap, however, the dealer was selling six

or seven carloads of these furnaces in a year, while most of his competitors were having trouble to get rid of a single carload.

The secret of this dealer's success was not price-cutting; for, although, according to the other dealers, furnace prices were "all cut to pieces," even they were compelled to acknowledge that this man always got good, not so say fancy, prices for his heating plants. Neither was his success due to the quality of the goods sold, or to any superiority of construction, for the heater he was selling was just a shade better than second rate. The simple fact of the matter was, that the dealer himself was so confident and so enthusiastic regarding the furnace he handled, that he seemed able to impress his customers with the idea that even the most obvious defects were really points of advantage.

Of course, quality is something that no furnace dealer should neglect. It pays to handle a quality article. But it must not be forgotten that quality alone will not sell furnaces; that the dealer has to use real salesmanship; and that real salesmanship with poorer goods often produces more sales than A-1 goods where there is no salesmanship at all.

A man who has studied such matters analyzed for me what percentage each branch of the salesman's art exerted in making sales. His analysis of a certain furnace sale was something like this:

Salesman's argument and explanation of superior features, 30 per cent.

Salesman's evident knowledge of the heating business, 10 per cent.

Enthusiasm of salesman and his confidence in the heater, 10 per cent.

Known responsibility of dealer and reliability of manufacturer, 15 per cent.

Appearance of heater, 10 per cent.

Recommendations of users, 5 per cent.

Price, 10 per cent.

General advertising, 5 per cent.

Miscellaneous, 5 per cent.

I am inclined to think that the recommendations of users would be more influential than the estimate indicates, where the salesman was equipped to use such recommendations systematically. But the salesman's knowledge of his goods, his confidence in them, his knowledge of heating generally, are the vitally important factors in successful selling.

Successful salesmanship implies more, however, than the mere ability to close sales. Each transaction should show a legitimate profit. Many a furnace dealer who seems to possess all the other necessary qualifications for successful selling falls down completely in the final analysis because he lacks the courage to ask what he knows a heating plant is worth.

The dealer who does business without a fair profit may get what gratification comes from closing the contracts and transacting the business; but his bank account does not benefit from his activity and sooner or later he loses out in the business.

A difficulty is that many furnace dealers have only a superficial knowledge of what the materials for warm air heating actually cost them. Yet they do not hesitate to quote prices on complete heating plants, basing their estimates simply on what they have been charging for similar work in the past.

This is a dangerous policy and an exceedingly unsatisfactory one. If the dealer has not the time to lay out the plant and make an estimate of cost, he had much better send the plans to some reliable manufacturer with whom he is doing business and have the heating lay-out and estimate made up by an expert in that line. In fact, for the ordinary dealer who has not had time to master all the details of cost and installation and who has a hundred other matters clamoring for his attention, this is usually the better and safer way to handle the business.

The very best method, however, is to know the business thoroughly, right from the ground up; to know and keep constantly in touch with

changing costs ; and to be able to go ahead with the planning and estimating a job requires with the perfect confidence engendered by this knowledge. Thus knowledge of the goods not merely helps to sell them, but helps to make the sale a profitable one.

Editor's Note: Aside from the fact that Mr. Lauriston uses the term "hot air furnace" instead of "warm air furnace," we believe that he states many facts that are worthy of serious consideration.

Selling a Furnace on Its All-Fuel-Burning Features.

Furnace installers have until the recent past clung tenaciously to the idea that a person buying a furnace would naturally be interested pri-

marily in the materials that went into the construction of the furnace. This idea was undoubtedly the out-growth of a failure to recognize the distinction between selling a piece of merchandise and the selling of a service which involved the use of a warm air furnace to carry out the provisions of the service agreement.

Happily for the home owner and for the industry that old idea is rapidly passing. Although there are still instances of that type of advertising, they are decidedly rare, as the installer has learned to observe how other industries market their products, and if he is not a good originator, he is at least an emulator and the automobile industry is a good guide.

The accompanying advertisement was taken from the *Troy, New York, Record* and is that of L. A. Mowers.

*Waterman-Waterbury Catalog
Is Unusually Well Arranged
for Installers' Reference.*

The very handsomely printed catalog of the Waterman-Waterbury Company's welded steel furnaces and of furnace supplies is unusually handy in its arrangement, thus making it very convenient for the installer in compiling his list of "outs" for his orders.

For example, on pages 14, 15, 16 and 17 are shown tables of capacities of furnaces; sizes of registers and which to choose for the job in question; illustration of all the pipes, wall stacks, boots, elbows, offsets and angles that may be needed for any job; price lists on registers, pipes and fittings—all in the order named. And with this they have a combination specification and discount sheet, on which every item is printed in the same order as on the catalog pages mentioned, so that the installer can easily locate in his catalog the items that he wants to list on his order blank.

Another "trouble dissolver" is the manner of listing the free areas of every register and boot—a No. 12 boot fitting a No. 12 pipe and a No. 12 register.

Featuring All-Fuel-Burning Qualities of a Warm Air Furnace.

On page 23 there is a valuable table showing sizes of cold air pipes with their areas, sizes of suitable faces, etc.

Installers who want to improve

their work will do well by asking the Waterman - Waterbury Company, 1121 Jackson Street, Northwest, Minneapolis, Minnesota, for a copy of this valuable catalog.

Urbana Research Residence Dedication, December 2, Punctuates Sentence of Progress in Warm Air Heating Industry.

Preparations for Reception of Large Crowd Being Made—Meeting of Western Warm Air Furnace & Supply, Chicago, Also Feature.

NO MATTER what temperature the thermometer registers at Urbana, Illinois, December 2nd and 3rd," says Allen W. Williams, "it sure will be a warm day in one place in that city."

"The reason is," he continues, "that warm air heating and ventilating engineers, managers, manufacturers and others interested in the great problem of heating the homes of America with warm air will be there for the dedication exercises of the Warm Air Heating Research Residence and the mid-year meeting of the National Warm Air Heating and Ventilating Association."

The dedication of this Research Residence is a punctuation mark in the sentence of progress toward better warm air furnace installations and a better understanding of the fundamental principles involved in performing this service.

"This notable contribution to scientific investigation, looking to the comfort and health of home dwellers, was made possible," said Mr. Williams, "by members of the National Warm Air Heating and Ventilating Association. They provided approximately \$25,000 for the erection of the Research Residence and they will gather in great numbers to see the results of their plans.

"The building will house one of the most elaborate arrangements of thermal testing equipment ever assembled in a residence laboratory. The university has been carrying on a series of tests of this nature since 1918, the results obtained being of such importance that the national association has backed it stronger and stronger each year.

The dedicatory program will include a review of the progress of scientific inquiry into warm air heating and ventilating problems; with a glimpse into the future, showing what may be expected in the even better heating of homes.

All interested are invited to attend. A very large attendance is promised."

We can only second Mr. Williams in urging each and every person who can possibly do so to attend the meeting.

Representatives of AMERICAN ARTISAN will be at the meeting to record the happenings. These will appear in our issue of December 6th and will provide our subscribers with a permanent record of the event.

To be on the ground, however, and to see the work and the men who are doing it is well worth the time and money spent to get there.

Don't forget the dates, December 2nd and 3rd, at Urbana, Illinois. Then, too, the Western Warm Air Furnace and Supply Association meeting will be held at the Sherman House, Chicago, December 4th and 5th.

* * *

While we were in the act of preparing this issue of AMERICAN ARTISAN for the press, President E. B. Langenberg, of the National Warm Air Heating and Ventilating Association, honored us with a visit.

President Langenberg was very enthusiastic about the coming meeting, and is looking forward to seeing a large attendance at Urbana. In fact, he was so well pleased with the house in its completed state that

he said he would gladly move into it himself.

With such an optimistic example set for us by the president of the organization, let's back it up to the limit of our ability.

How Do You Arrive at Those Delivery Charges?

Delivering the goods after they are sold is just as much a part of the service rendered the customer as the selling them. Therefore, delivery costs should be added to the sale price of the goods in the same manner as are freight and drayage charges.

Supplying a community with necessary merchandise means placing the merchandise in the home of the ultimate consumer and all charges incident to getting them there must be added to the ultimate cost to the consumer.

Care must be exercised, however, not to abuse the trust. Delivery charges are pretty much the same for all merchants in a single community and any overcharges will soon be detected. This always results in a loss to the business far greater than the amount of money brought in through the extra charge.

Farmer Deserves Courteous Treatment When in Your Store.

The farmer, when in your store, is deserving of as much courtesy and consideration as his more polished city-dwelling brother. It is every clerk's business to know his stock so well that he can be of service to the farmer when he comes to town. This service consists not only in quoting prices on articles which the farmer selects, but in making helpful suggestions and bringing to the farmer's attention the newest methods of doing his work. This will require a familiarity with the farmer's work from the clerk which must be gained partly from a thorough study of former methods of doing that work as contrasted with the present methods and partly from observation.

Can Gravity Warm Air Heating Plant Be Made to Work Efficiently by Installing Fan? Asks George Reinhardt.

Has Three-Story, Thirty-Room Hotel Building Installation to Rectify Where Warm Air Ducts Are Extremely Long.

WARM air furnace installers often find themselves confronted with problems much out of the ordinary. As the warm air heating industry becomes more widely known, these instances will also be more frequent. Many building owners attracted to the seeking of information on warm air heating by its efficiency, economy and health giving qualities will present problems of ever greater complexity. Upon the efficiency and dispatch with which the installers meet these problems will depend the future growth of the industry. It, therefore, behooves each man in the industry—whether installer or manufacturer—to jump in and help the brother installer solve the complex problem which that brother presents through AMERICAN ARTISAN.

If it is important to help a brother installer figure on a new installation having a complexity, how much more so is it to help him rectify a warm air heating plant now installed, but which refuses to function properly?

From George Reinhardt, Milwaukee, Wisconsin, comes an inquiry

for some help on a furnace installation which may possibly require a fan arrangement.

The building is a 3-story hotel structure, containing about thirty small rooms. The installation as it now stands gives no results.

Mr. Reinhardt's letter follows:

To AMERICAN ARTISAN:

I am mailing you a sketch of a warm air furnace job of some complexity which I have been called upon to rectify.

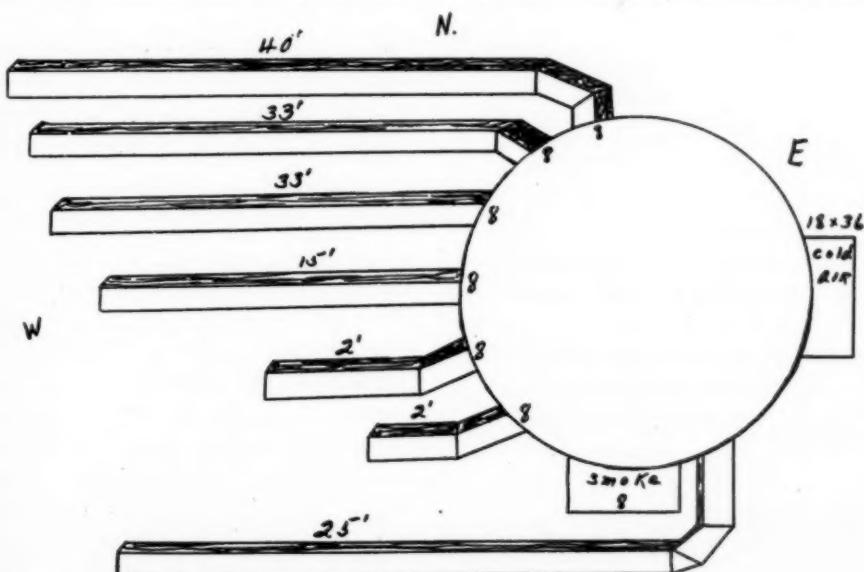
The building is an old 3-story hotel structure, having thirty small rooms.

The warm air heating plant refuses to give results.

The basement is very low. The warm air ducts are extremely long, as a glance at the sketch shown herewith will indicate. To add to the difficulty, these ducts have no rise.

I am convinced that it is impossible to make warm air travel this long horizontal distance by mere gravity or of its own accord.

What I should like to know is, can I make this heating plant give sufficient results by installing a fan



Reinhardt's Gravity Warm Air Problem.

system to force the warm air through the ducts?

If any of my brother installers have had a similar experience, I should like to know from them how they solved the problem.

In this way I will be enabled to put this installation in a first-class working order and at the same time raise the standard of warm air furnace installations.

GEORGE REINHARDT.
Milwaukee, Wisconsin.

Charles Koehring Features Time Element in Warm Air Furnace Advertisements.

Should a warm air furnace advertisement sell merchandise or service? A question of this type is apt to provoke a large amount of discussion.

Garland Furnaces



50 Years' experience makes the Garland a better and more economical furnace. The patented slotted fire bowl permits the use of cheap coal. Extra large radiator gives more heat from equal amount of fuel. Easy payments.

CHARLES KOEHRING
878-882 Virginia Ave.
DR exel 9400.

Furnace Advertisement Taken from Indianapolis News.

Installers and furnace salesmen, who are progressive, will answer without hesitation that the advertisement must sell service; that, although the aim is primarily to sell as many furnaces as is possible first, last and always, more furnaces can be sold over the service route than any other. If two furnaces can be sold by interesting the prospect in the furnace through the appeal to

comfort, where only one can be sold by telling the prospect all about the castings he is buying, then obviously the route leading to the comfort appeal is the one to take.

No one is to infer from this that the kind of castings which go into the assembled product are any less important in closing the sale. Each

point of merit in the furnace does its full share in making the sale once the prospect is interested.

The time element in the accompanying advertisement of Charles Koehring, taken from the *Indianapolis, Indiana, News*, is exceptionally well taken. It builds confidence and assurance.

uct being offered. Human nature can be interested in almost anything if the right tactics are used. The idea is to determine in what way the product can be used to advantage by the customer.

A salesman recently deluged me with a vast amount of literature on about a dozen different things all the way from ladies' hosiery to drayage service. He came in through the stuff on my desk and said: "Help me out, will you?"

He offered me no service that I could use and still he, in turn, asked me to help him. Now why should I help a man like that?

The same is true of an advertisement which does not make its appeal on the basis of service to the fellow appealed to.

On the other hand, when you run across an advertisement such as the one shown in the accompanying advertisement of Edw. B. Stoecklin, reprinted from the *Highland, Illinois, Leader*, you realize that some one of these installers has grasped the idea and he is on the right road to success with his advertisements.

The advertisement shown could have been improved by showing the interior of the house instead of the exterior. The address of the place of business should also have accompanied the name. The reading matter should have been edited down so as to give the reader the main thought in as short a time as possible.

The Worth Whileness of Better Business.

The real problem of the human race is to get men interested in better government and better business. Better government and better business must vitally interest all men and influence their entire lives. The two are actually the bread and butter of men. Yet it remains most difficult to interest men in these two basic factors of life and this indifference is the one thing that willing workers and interested men cannot solve. Patriots and industrial leaders, men who are willing to work just for the betterment of all, and who meet with this colossal indiffer-

E. R. Stoecklin Pushes His Furnaces by Telling of the Comforts Made Possible With Them.

Economy in Fuel Is Also a Feature of Appeal Which Adds Effectiveness to the Ad.

THERE is something fundamental and substantial about a warm air furnace advertisement which makes its appeal from the standpoint of comfort.

Man enjoys being comfortable

and anything which tends to make his home or himself comfortable takes his eye and arouses his interest.

Advertising does nothing if it does not arouse interest in the prod-



When planning your new home, don't overlook the important item of heat. The future health and enjoyment of your family depends upon the heating system.

In more than 160,000 homes—from coast to coast, and from Florida to Canada—

in Alaska—in your own neighborhood—the Caloric Pipeless Furnace is proving by actual performance its ability to give utmost warmth and comfort under extreme weather conditions.

The Caloric is a masterpiece of furnace construction. Delivers the maximum amount of heat from every pound of fuel used. Requires attention but twice a day. Easily holds fire over night, assuring warm rooms in the morning.

These and many other advantages commend the Caloric as THE heating system for YOUR home. We'll send you interesting book of facts—“Summer in Winter”—without placing you under any obligation. Write, phone or call for it today!

Edw. R. Stoecklin.

Furnace Advertisement Appearing in *Highland, Illinois, Leader*.

ence, time never ending, know that the progress of the world is measured in spite of the average man with his chronic and damnable indifference. The average man only deserves the rights and privileges of

democratic form of government, which is the result of generations and ages of men who fought, bled and died to bring about this priceless heirloom, after he has worked and earned that right.

Louisville Furnace Installer Sold 49 Jobs Per Month in 1923 and 90 Per Month in 1924.

Concern Has Been in Business Only 19 Months Altogether, But Owners Believe in Hunting for Customers.

MANY readers of AMERICAN ARTISAN know Fred Gottschalk, who sells Utica furnaces.

Fred has a lot of good customers, installers who not only know how to do a good job, but also know how to find the chance to do the job and make a profit on it.

One day he was in our office and told of some of his friends who have made a conspicuous success in selling furnaces at retail, and one of the concerns that he mentioned was the Stiglitz Furnace Company in Louisville, Kentucky.

What he told us was so interesting that we wrote to the Stiglitz Furnace Company, so as to obtain some more data, and here is the portion of their letter in which you will be interested:

November 6th, 1924.

To AMERICAN ARTISAN:

May, 1923, the Stiglitz Furnace Company was organized, having bought the business from the estate of the C. G. Stiglitz & Sons, and from May until December 31, 1923, we sold and installed 392 furnaces.

From January to October 1, 1924, our sales were 814 furnaces, and for the benefit of many others who are in the furnace business, and realizing fully, that we are unable to give any advise, we will tell our experience during this year.

Each day we have published in our city the "Court Record" of building permits, new buildings, remodeling and repairing. This information is copied on what we call "Prospect Sheets," giving the name, location, architect and builder and whatever other information we can obtain. The other side of this pros-

pect sheet is marked off in one-half inch spaces, on which the salesmen draw the general floor plans of the house. We use every necessary means possible to meet the owner, builder and architect.

We have found in employing salesmen, that the men with furnace experience have not made us the best salesmen and as an experiment we employed one salesman who had been selling automobile tires and another who had been selling root beer, and after several weeks of schooling these men, their success had been more or less phenomenal.

Our installations run from \$115 a job to as high as \$3,500 a job, as we have furnaces of sufficient size to heat factory buildings, school houses and churches.

We have a display of the furnaces at our sales room and office, and we find that this is a big help to our salesmen. In most cases when they have a man interested enough to come in and look at the furnaces they do not have much trouble selling him.

We have spent less than \$500 in newspaper advertising; we have no special demonstrations.

Our present building covers about 20,000 square feet of floor space and are now contemplating a larger and better building with the probability of operating our own foundry.

The business that we have done this year has been directly in Louisville, Kentucky.

We thank you very kindly for your interest, and beg to remain,

Stiglitz Furnace Company.

W. G. STIGLITZ.

How Market Analysis Saves Time and Money for Advertising.

Lucretius, that great Roman, epicurean philosopher, spoke very wisely, although perhaps with little thought that his words would have such close application to the modes of merchandising of a time some 1,970 years after his own, when he said: "Gutta cavat lapidem non vi sed saepe cadendo," which when translated means: "Water makes a hole in a stone not by a single mighty effort, but by falling on it again and again."

Application of Lucretius' words can be easily transferred to advertising.

Advertising does not bring results with one loud and long shriek, followed by silence.

It can bring results only when it is continuous in its application and when it is directed toward a known market.

The days of indiscriminate advertising are over, we are happy to say. Henceforth advertising will be done upon a scientific basis or it won't be done at all.

The retailer of tomorrow will demand a reasonable assurance of returns beforehand and when such is not forthcoming, he will refuse to spend his money for advertising until it is.

Market analysis—determining the population, its characteristics and habits—is not difficult. Neither is it difficult to determine the possible market for stoves, warm air furnaces or sheet metal work in any particular locality or section, and that is what is meant by market analysis.

The market analysis shows the merchant a possible market for so many articles. When the sales record show that number of sales to have been made in that locality, the merchant would be unwise to attempt further publicity until he learned how that market had changed during the interval of time from his first analysis to the time of making his sales record inspection.

Grand Rapids, Michigan, Is Learning That Warm Air Heating Is Healthful and Economical Heating.

Consistent Advertising Along Positive Lines Is Bringing Positive, Profitable Results in Furnace Selling.

GRAND RAPIDS, MICHIGAN, is getting to know that warm air furnaces are used for heating houses, and also that a well installed warm air furnace is the best heating plant that can be used

for residences—from the standpoint of low first cost, economy of operation and upkeep, and also from that of healthful heat, because of its ability to furnish a constant flow of fresh, humid air.

A Better Furnace

—Backed by Better Service

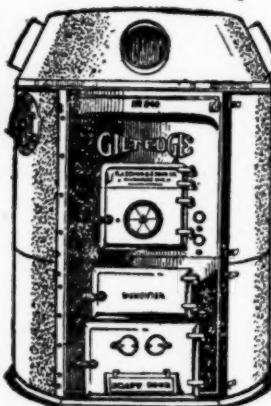
BY every standard, test and comparison approved by authorities on warm air heating the Gilt Edge Furnace shows itself a superior heater. In efficiency, economy, durability and convenience it outstrips the field.

The deep, straight, Gilt Edge firepot with ribbed sides has 40 to 89 per cent greater heating surface than other furnaces. The large grate area provides unusual heating capacity. The large diameter and girth of the Gilt Edge radiator increases radiating surface and gives greater effectiveness to the heat produced by combustion.

The patented Anti-Clinker grates prevent fuel waste. The high ash pit makes ash removal easy and lessens the danger of burning out the grates. The water pan is easy to get at and keeps the air property moist so that cozy comfort is secured without wasting fuel by forcing the fire to maintain high temperatures in the rooms.

The New and Even Better
GILT EDGE
FURNACE

when properly installed will give you most heat from least fuel. We study your buildings, recommend the size of furnace and the type of installation that will heat your home best and most economically—make correct installations and guarantee your comfort and satisfaction.



Come in and see this Master Furnace or telephone and one of us will call.

Grand Rapids Gilt Edge Company

C. J. HEYBOER, Manager

1010 Eastern Ave., So. E.

Telephone 32078.

One of a Series of Warm Air Furnace Advertisements Run by Grand Rapids Installer.

We have mentioned in former issues the advertising campaign conducted by the Grand Rapids sheet and heating engineers and the fact that they advertise a guarantee under which the association binds itself to "make good" on any installation that a member may have put in and that is not working satisfactorily.

In the accompanying illustration we show a reduction of three column, ten-inch advertisement run in the Grand Rapids papers with good results by C. J. Heyboer of the Grand Rapids Gilt Edge Company.

This advertisement is one of a series, a new one being run every week. Mr. Heyboer states that each advertisement brings a good lot of inquiries and that out of these a profitable percentage are turned into sales.

Making False Promises to Create Sales Is Poor Policy.

Clerks dealing with customers over the counter should be carefully instructed in regard to attitude and conduct before the customer.

It may seem a small matter to say that a clerk should not promise specific delivery on purchases unless he is reasonably certain that delivery will be made at that time.

Nothing irritates a customer more than to be expecting delivery on an article which then fails to show up at the appointed time. Such performance entails personal or telephone calls taking time of not only the customer, but the store clerks as well.

Promising the impossible in order to close the sale more quickly is a bad practice and one which cannot fail to redound to the detriment of the store and the salesman who indulges in it.

Each clerk should familiarize himself with the delivery system of his store so that he will know when and when not to promise delivery.

The world isn't half so much interested in the reason for your failure as it is in the formula for your success.

President Markle Appoints Liaison Officers for National Sheet Metal Contractors.

These Men Will Meet With Representatives of Other Organizations in Building Trades.

AT THE Washington convention of the National Association of Sheet Metal Contractors, it will be remembered, a resolution was passed instructing President W. C. Markle to appoint members as "liaison officers," their duties as such being to keep in touch with and attend meetings of other organizations interested in building construction, such as architects, furnace manufacturers, heating and ventilating engineers, etc.

The following appointments are now announced by President Markle:

American Institute of Architects, Paul F. Brandstedt, Washington, D. C.

American Society of Heating and Ventilating Engineers, Arthur P. Lamneck, Columbus, Ohio.

American Zinc Institute, W. A. Fingles, Sr., Baltimore, Maryland.

National Warm Air Heating and Ventilating Association, John A. Pierpoint, Washington, D. C.

National Slate Association, E. L. Seabrook, Philadelphia.

Sheet Metal Branch, National Hardware Association, George Harms, Peoria, Illinois.

Other national associations having been approached on the appointing of reciprocal representatives, have the matter under consideration. A number of complimentary letters endorsing the plan have been received. The other national organizations approached are:

Heating and Piping Contractors. International Association of Master House Painters and Decorators.

Association Electragist International.

National Association of Master Plumbers.

National Association of Building Trades Employers.

The underlying idea is that, inasmuch as all of these organizations have many points of interest in

common with the sheet metal contractors, the best way to solve their mutual problems will be by united action rather than by going it alone.

The gentlemen appointed are all of high type, and we look for great results from this move. Coöperation always makes conditions better.

Milwaukee Sheet Metalers Hold November Meeting.

The Master Sheet Metal Contractors' Association of Milwaukee, Wisconsin, held its meeting recently with an attendance of sixteen members and President John Millen presiding.

The minutes of the previous meeting were read and approved.

The report from the National Secretary was ordered placed on file.

The Secretary was instructed to send for copies of the Standard Code, regulating the installation of warm air furnaces, and distribute a copy to each member.

The Secretary was instructed to send a list of names of the members to the General Contractors' Association.

John Bogenberger gave a report on the Employers' Council.

The committee that met with the Sub-Contractors gave their report.

Reinke & Reinke, 514 Market Street, Milwaukee, were accepted as members.

Following a general discussion, the meeting adjourned at 9:30 p. m.

I. C. Vanasdal Says Editor's Answer to Smith Is Fourteen Quarts Short.

We were overjoyed when learning that neither Harry Frye nor William Scott failed to find the discrepancy in the Editor's solution to the H. L. Smith problem appearing

in a recent issue of AMERICAN ARTISAN.

Our joy was further increased when I. C. Vanasdal, 912 Maynard Avenue, Seattle, Washington, informed us that he, too, had found an error of about fourteen quarts in the problem.

Mr. Vanasdal's letter follows:

To AMERICAN ARTISAN:

It pains me exceedingly to inform you that a tank made according to the dimensions given in your reply to H. L. Smith would be about fourteen quarts shy in capacity.

The formula for the frustrum of a cone is $A + a + \sqrt{Aa} x - \frac{h}{3}$

where "A" and "a" are the two bases and "h" the vertical height. It can be shown by algebra that this formula may be used in reverse where the volume and height are given and the equation is $3x^2 + d$, where "x" is a mean between the two diameters and "d" one-half their difference.

The volume must first be divided by one-third the vertical height before applying this equation.

Very truly,

I. C. VANASDAL.

Seattle, Washington.

Can You Beat Callahan in Subscribing to AMERICAN ARTISAN for the Forty-Second Time?

Unsolicited compliments are doubly sweet, and especially so when they come from men who have been readers of AMERICAN ARTISAN for many years, as has Mr. Callahan, whose letter follows:

To AMERICAN ARTISAN:

Enclosed please find \$2 in renewal of my subscription for the forty-second time, and I wish to thank you for your generous response to my requests for information and favors of your free want ad column.

No one can fully appreciate your valuable publication until they ask favors of that sort and find that you are always on the job to assist.

Yours truly,

T. B. CALLAHAN.

Nickel Zinc Proves Valuable in Constructing Polished Fixtures and Spice Boxes in Kitchen Cabinets.

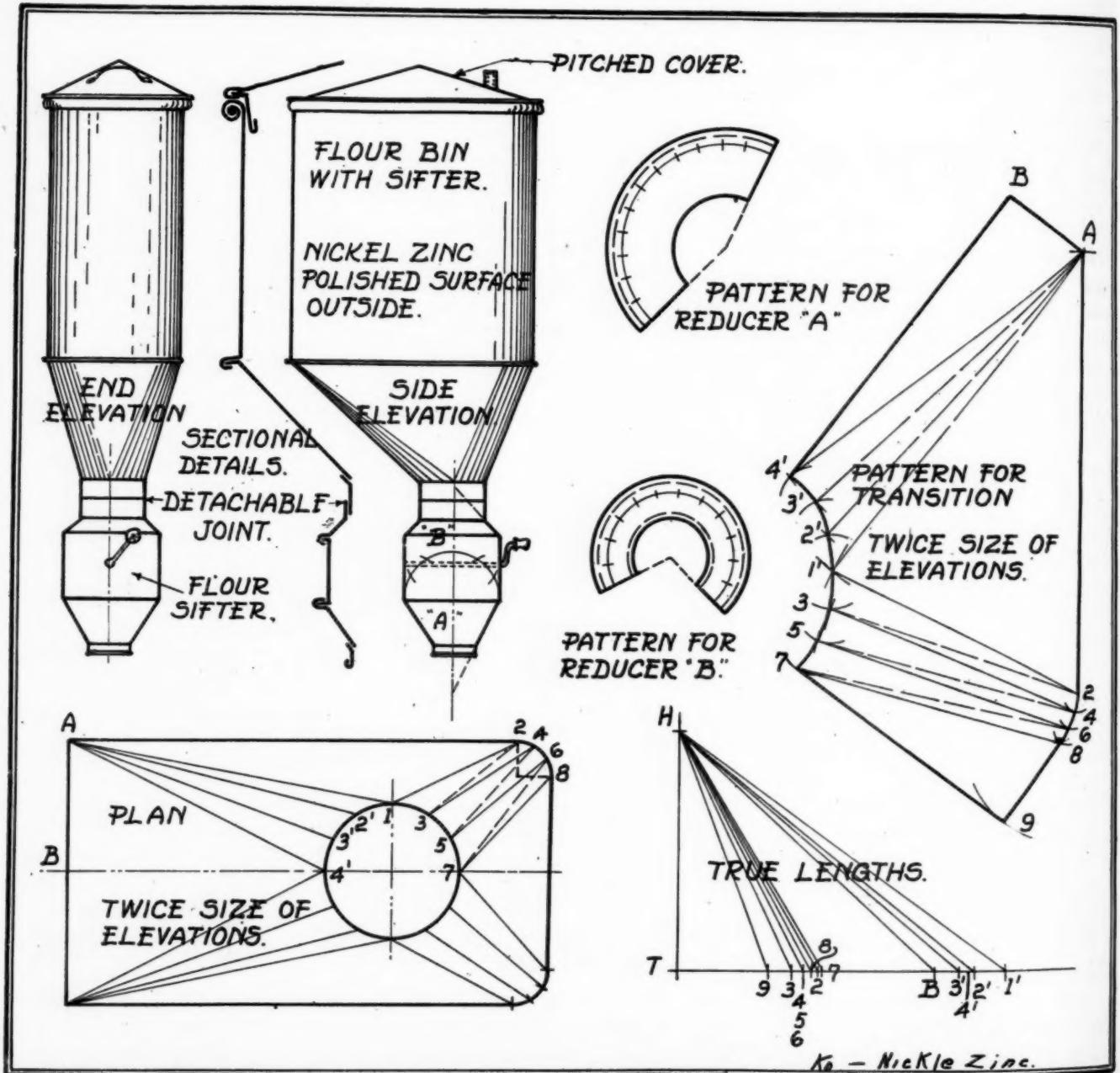
Kothe Shows How Patterns for Cabinet Spice Boxes Are Made, Developing It With Triangulation.

Written Especially for AMERICAN ARTISAN by O. W. Kothe, Principal, St. Louis Technical Institute, St. Louis, Missouri.

HIGHLY finished metal as nickel zinc is found desirable for making spice boxes in kitchen cabinets and for purposes of demonstration in wholesale and retail establishments. With nickel zinc a great many exposed fixtures can be made that stand up as well as other metals and look better.

In the illustration we show a flour bin made to fit into a kitchen cabinet. The pattern shows one way of making such a bin, and, although things of this sort can be simplified, this work involves some interesting problems in drafting. Naturally the top bin is made to the height, width and depth the cabinet permits. The

same holds true with the hopper and the sifter arrangement. The sifter is made with a slip joint to permit easy removal and also for renewing the screen when need be. In this case the two front corners are described to a quadrant to facilitate cleaning and for appearance, while the back corners are sharp.



Kitchen Cabinet Flour Bin.

So we first draw the outline of plan. Next describe the quadrants of corners, making a suitable radius of possibly $1\frac{1}{2}$ to 2 inches, then describe the round-collar section to correspond to the size of the sifter. Since the hopper is an irregular shape, triangulation must be used in its development. Therefore, treat the full circle in say twelve equal spaces, and the quadrants into three equal divisions. After this draw lines, thereby dividing the surface into triangles; numbering all points and bends.

Now to determine the true length of these plan lines, we must add altitude to them as in diagram of true lengths to the right. Here H-T is equal to twice the height of our elevation drawings, and it, therefore, corresponds with the plan. With dividers pick the plan lines as 1-2, 2-3, 3-4, 4-5, etc.; also A-1, A-2', A-3', A-4' and set over from T on the horizontal line of diagram. Observe this process is merely transplanting our plan lines, which form base lines, to a convenient position where he can add one altitude line for all of them. Hence, by joining all these points on the base line as 1'-2'-3'-4', etc., to H, we have the true lengths.

To set out the pattern, draw any line as A-2, equal to A-2 of the plan. Now use dividers or compasses, and pick true length H-1' from diagram, and using A as center, strike an arc as at 1. Next pick true length H-2 of the shorter lines, and using 2 in pattern as center, cross arcs as in point 1. Now the spaces as 1-3-5-7, etc., represent the girth spaces around the collar, while 2-4-6-8 of plans represent the girth spaces for the quadrants.

Therefore, set one pair of dividers to a space as 1-3 of the collar, and set another pair of dividers to space 2-4 of the quadrant. With compass No. 1, strike arcs 2'-3 from point 1 of pattern, and with compass No. 2 strike arc 2-4 from 2 as center of pattern. Now use a third pair of compasses or trammel points and pick true length H-2', and using A in pattern as center, cross arcs as in point 2'. With compass No. 1,

strike arc 3' from 2', and then pick true length H-3' and set in pattern as A-3'. Repeat and describe arc 4' from 3' and using true length H-4'; cross arcs as in point 4'. Now pick the half width as A-B from plan and from A in pattern strike arc B. Pick line H-B from diagram and using the last center 4' as center, cross arcs as at B. This enables drawing outlines for the back half of pattern.

To continue with the other half, pick true length H-3 from diagram, and using 2 in pattern as center; cross arcs as in point 3. Next pick true length H-4 from true length,

made equal to $2\frac{1}{2}$ times the thickness of the wire, while the cover can be laid out similar as we shall show in another example in a future article.

Detroit Sheet Metal Men Hold Monthly Meeting.

The regular monthly meeting of the Detroit Sheet Metal and Roofing Contractors' Association was held at the Elks' Club, Monday evening, November 10th, and was very well attended.

The meeting was preceded by the usual dinner and the principal topic for discussion was the coming state convention, which is to be held in Detroit the last week in February, 1925. The members were very enthusiastic about the convention. It is determined to make this convention the best that has ever been held in this state. The following committees were appointed:

General Chairman—R. C. Mahon.

Reception Committee.

William Sullivan, chairman.

Lew Busch.

Chris. Young.

Miles Hull.

Hugo Hesse.

Entertainment Committee.

Al. Berschbach, chairman.

William Busch.

J. Brodie.

T. Basman.

R. Drouillard.

Hotel Reservation Committee.

Tony Basman, chairman.

J. C. Stewart.

Louis Oehring.

Robert Candler.

Jake Reis.

Publicity Committee.

Frank Roberts, chairman.

Frank Dempsey.

Arthur Marx.

Jos. G. Hartge.

Financial Committee

A. F. Pucrit, chairman.

Charles Raymo.

Al. Berschbach.

Chris. Young.

Bill Busch.

Tony Basman.

Bill Emke.

One in Every Tin Shop

Have you one of those irritating puzzles in your tin shop? One of those tiny thorns in the "finger" of your business which festers up and interrupts the smooth rhythm of an otherwise well-oiled machine?

Write to American Artisan concerning your troubles and have those bothersome difficulties cleared up.

Don't work behind a smoke screen!

Let us help you!

and using new point 3 as center cross arcs in point 4. With compass No. 1, strike arc 5 and with compass No. 2 strike arc 6 from 4 in pattern, and then repeat the above operation until points 7-9 are established. This permits drawing lines through all points where arcs cross, and the pattern is finished.

The pattern for bin is laid out as any straight piece of work, picking the girth direct from the outline of plan. Observe the bin and the hopper edge must fit together, and, therefore, both edges must have the same perimeter. The flaring parts A and B of sifter are developed identical to any true flaring article as funnel or pail or pan. The girth is obtained by either dividing a semicircle in equal parts as we show, or by multiplying the diameter by 3.1416. Laps for seaming must be allowed extra as per the sectional detail. The lap for the wire edge is

Copper & Brass Research Association Holds Annual Meeting and Elects Officers.

President Agassiz Reviews 1924 Business and Expects Increase in Copper and Brass Sales for 1925.

THE fourth annual meeting of the Copper and Brass Research Association was held at 2:30 o'clock November 6th at its offices, 25 Broadway, New York city. The following were elected members of the board of directors, the first nine comprising the executive committee:

R. L. Agassiz, president, Calumet and Hecla Consolidated Copper Company.

Edward H. Binns, president, C. G. Hussey and Company.

Stephen Birch, president, Kennecott Copper Corporation.

F. S. Chase, president, Chase Companies.

John A. Coe, president, The American Brass Company.

Walter Douglas, president, Phelps Dodge Corporation.

Charles Hayden, vice-president, Chino Copper, Nevada Consolidated Copper, Ray Consolidated Copper and Utah Copper Companies.

C. F. Kelley, president, Anaconda Copper Mining Company.

H. J. Rowland, secretary and sales manager, Rome Brass and Copper Company.

J. W. Allen, treasurer, Greene Cananea Copper and Inspiration Consolidated Copper Companies.

Henry F. Bassett, president, Taunton-New Bedford Company.

H. C. Bellinger, vice-president, Chile Exploration Company.

J. Parke Channing, vice-president, Miami Copper Company.

Joseph Clendenin of Braden Copper Company.

Carl F. Dietz, president, Bridgeport Brass Company.

B. Goldsmith, president, the National Brass and Copper Company.

E. O. Goss, president, Scovill Manufacturing Company.

U. T. Hungerford, chairman of board of directors, U. T. Hungerford Brass and Copper Company.

C. V. Jenkins, treasurer, Chino Copper, Utah Copper, Nevada Consolidated Copper and Ray Consolidated Copper Companies.

Wm. Loeb, vice-president, American Smelting and Refining Company.

H. B. Paull, auditor, Calumet and Arizona Mining and New Cornelius Copper Companies.

A. B. Seelig, manager, Michigan Copper and Brass Company.

At a meeting of the board of directors the following officers were elected:

President, R. L. Agassiz.

Vice-president, C. F. Kelley, F. S. Chase, Walter Douglas, H. J. Rowland and U. T. Hungerford.

Treasurer, Stephen Birch.

Secretary, George A. Sloan.

Manager, William A. Willis.

Following the meeting President R. L. Agassiz issued the following statement:

"Domestic deliveries of copper during the first nine months of the year amounted to 1,156,000,000 pounds, which, with consumption going on at the present rate, means a total for the year of approximately 1,600,000,000 pounds. These figures represent refinery deliveries and take no cognizance of the very large consumption of secondary or scrap copper during the year. The domestic consumption in 1923 was about 1,470,000,000 pounds, so it will be seen that not only has the record consumption of 1923 been maintained during the current year, but even substantially increased in volume.

"The domestic industries showing the largest increased uses of copper, brass and bronze are the electrical and building fields. The former consumed about 25 per cent more metal than in 1923, while there was an approximate increase of 12 per cent used in building construction.

"In the building field the use of brass pipe has shown a very large gain over that of any previous year. To date there has been more than a 30 per cent increase over the first ten months of 1923 and this ratio will, I believe, be maintained during the remainder of the year. There also has been a large increase in the use of copper for leaders, gutters and downspouts, copper roofing, and in the use of brass and bronze hardware fixtures.

"Refinery exports of copper during the year should be more than 1,000,000,000 pounds. During the first nine months of the year exports were in excess of 815,000,000 pounds, as against total refinery exports during 1923 of about 844,000,000 pounds. The pre-war average was close to 800,000,000 pounds, so it will be seen that in spite of the chaotic condition of affairs in Europe during the greater part of the year, there has been a substantially increased foreign business for American producers. If Europe had gone ahead in copper consumption at anything like the rate maintained in the United States, exports would have reached a huge figure.

"With the working out of the Dawes plan, I believe, conditions abroad will show marked improvement and that copper exports during 1925 will be even greater than the figures show for 1924, in spite of the fact that this is a record year in this field.

"Because of the excellent prospects for increased foreign business, and because there is nothing to indicate any falling off in domestic consumption, I believe the outlook for the copper industry is most encouraging. There is, in this country today, a much better understanding of copper and its uses. This has been brought about in the main by the educational work of the association, a work which will be continued through 1925."

The following companies now comprise the membership of the Copper and Brass Research Association:

American Smelting and Refining Company.

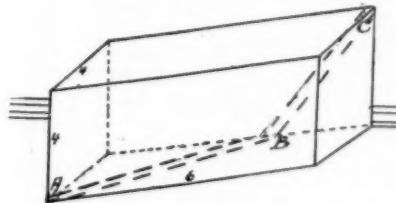
Anaconda Copper Mining Company.
 Arizona Commercial Mining Company.
 Braden Copper Company.
 Calumet and Arizona Mining Company.
 Calumet and Hecla Consolidated Copper Company.
 Chile Exploration Company.
 Chino Copper Company.
 Engels Copper Mining Company.
 The Granby Consolidated Mining, Smelting and Power Company.
 Greene Cananea Copper Company.
 Inspiration Consolidated Copper Company.
 Isle Royale Copper Company.
 Kennecott Copper Corporation.
 Miami Copper Company.
 Mother Lode Coalition Mines Company.
 Nevada Consolidated Copper Company.
 New Cornelia Copper Company.
 Old Dominion Company.
 Phelps Dodge Corporation.
 Ray Consolidated Copper Company.
 Shattuck Arizona Copper Company.
 Utah Copper Company.
 White Pine Copper Company.
Copper and Brass Fabricating and Distributing Companies.
 The American Brass Company.
 Bridgeport Brass Company.
 Chase Metal Works.
 Waterbury Manufacturing Company.
 T. E. Conklin Brass and Copper Company.
 Dallas Brass and Copper Company.
 U. T. Hungerford Brass and Copper Company.
 C. G. Hussey & Company.
 Merchant & Evans Company.
 Michigan Copper and Brass Company.
 The National Brass and Copper Company.
 New England Brass Company.
 The J. M. & L. A. Osborn Company.
 Richard & Company.
 Rome Brass and Copper Company.

The Sandusky Foundry and Machine Company.

Scovill Manufacturing Company.
 Taunton-New Bedford Copper Company.

S-O-S! S-O-S! S-O-S!
Scott Wants to Know About Bracing of Rectangular Tank.

Another sheet metal worker broadcasts his "S. O. S." William Scott, Juniata, Pennsylvania, is required to construct a rectangular tank, 6x4x4 feet, with a brace riveted or welded to the bottom and



How Short Can You Make A B C?

side and extending from A through B to opposite upper corner at C. He wants to know what is the shortest length for the brace, every point of which must touch the bottom and side. He authorizes us to offer on his behalf a tin night shirt for the best solution.

The Termination of the "Brass-Tack" Query.

In a recent issue of AMERICAN ARTISAN R. M. Hubler asked us to trace the expression "Getting Down to Brass Tacks." Although this inquiry was somewhat out of our line, we joyfully delved into the musty volumes of the Public Library, much to the discomfort of book worms (not the two-legged kind), but with no sign of the elusive expression. Into the high ways and by ways we went, terminating our search even in the halls of the Congressional Library, Washington, D. C. Here we learned from the Chief Bibliographer of that exalted institution that a newspaper had traced the expression to the method of measuring dry goods at a counter on which a yard was laid off with brass tacks, thus permitting the clerk to get down to exact measurements.

Could we have traced that particular newspaper paragraph, our triumph would have been complete and unconditional. We should then have been able to march from the field of battle as proud as any "Red Grange." In this we were disappointed. Our last resort in the search was to Percy W. Long, secretary of the American Dialectic Society, Cambridge, Massachusetts, to whom we carried our problem. That honorable gentleman, however, informed us that the society had not on file the early history of the expression.

Now, like Davis and Bryan, LaFollette and Wheeler, we retire from the limelight knowing that we have done our best and living in the hope that our subscribers will realize that no inquiry is too large nor too trivial in the interest of the industries we represent to receive our full and undivided attention.

If You Can Beat Callahan's Record, Perhaps You Have O'Neill Outdistanced Too.

To have been a subscriber to AMERICAN ARTISAN for almost fifty years is a record that few can beat. But here's what Walter F. O'Neil, 126 East 26th Street, Minneapolis, Minnesota, has to say in renewing his subscription:

To AMERICAN ARTISAN:

I am mailing you a P. O. money order for \$2 for a renewal of my subscription.

I have been a subscriber for almost a half a century and still want it. So credit me with another year's subscription.

WALTER F. O'NEIL,
 Minneapolis, Minnesota.

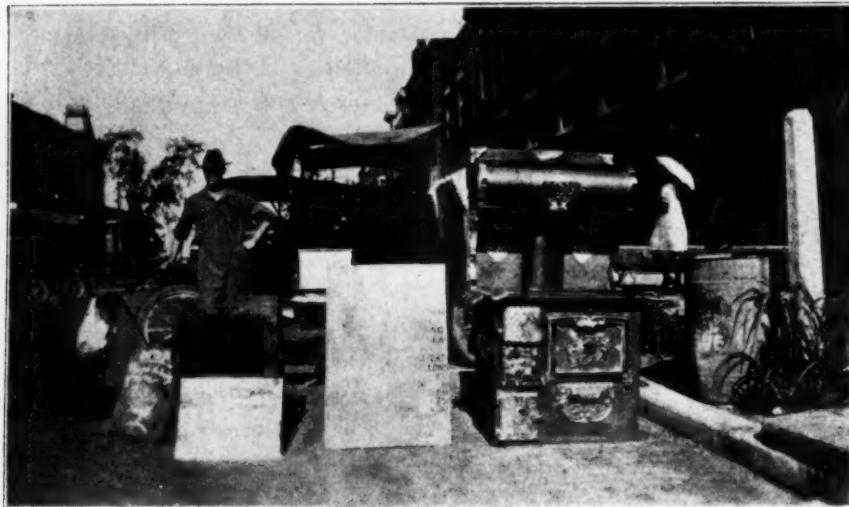
You cannot expect others to believe in you if you do not believe in yourself. No salesman ever worked in a retail store who has not experienced a kind of mental "buck ague" when customers have asked to see certain articles. Mentally the salesman has admitted to himself that he cannot make the sale, and in such cases he rarely does.

Percy H. Smith Builds Successful Business by Making Old Articles Good as New.

Missourian Rebuilds Old Ranges, Repairs Stoves, Does Sheet Metal Work in His Fixit Shop.

FULTON, MISSOURI, is renowned as the chief city of the mule country. More fine mules are sold in and around Fulton than in

enough work to keep him busy for some time. Now he runs a regular series of advertisements, samples of which are shown herewith.



Mr. Smith and What He Does.

any other place in the United States.

But that is not the only thing that this flourishing Missouri city can boast of, for among its business men there is a man who has built up a successful enterprise in an unusual line and at the same time has regained his health.

Percy H. Smith is his name, and evidently his first name did not stop him from taking up the particular line of work nor has it in any way been a handicap to him.

Some years ago, Mr. Smith found it necessary to give up his former business because of failing health and in looking around for something that would keep him busy as well as make it possible for him to earn a living and at the same time spend considerable time in the open air, the idea struck him that many of the old stoves and ranges that were discarded might be made to render useful service for many additional years if they were properly repaired.

So he set up a shop for that sort of work, in the rear of his home and put an advertisement in the local papers, as a result of which he got

long single column advertisement is directed.

The photograph shows a kitchen range which has been rebuilt by Mr.

Stove Repairing

We carry in stock repairs, wicks and inside chambers for over 200 different makes of oil stoves. We are prepared to serve you, either in repair parts or the cleaning of your oil stoves, with prompt service and good work.

Now is the time to put your winter stoves in order, as we can supply parts for cook stoves, heating stoves and ranges.

Phone 663

Smith's Fixit Shop

Appealing to Out-of-Town Customers.

Smith. All the sheet steel is new; the asbestos lining has been entirely replaced; the old trimmings replated (this was done in a plating shop). The old sheet steel body is shown in front of Mr. Smith. The signs did not reproduce well because of the strong sunlight, but the large sign next to the range apparently con-

Your Bank Might Fail

But if your stove or range, when new, gave you good service, that stove or range will not fail to give you the same service under the same circumstances after it has been repaired or rebuilt at the shop.

Why not have that stove made over as you do your dress?

We replate the trimmings for stoves and autos and when returned will be exactly as good looking as new.

Your stove or range after 25 or 30 years of service can be rebuilt with a new body and such castings as needed, the trimmings replated and you will have a new stove, both in appearance and operation, for the fraction of what a new one costs now.

Money saved is money earned. Order your repairs now. You will not make a mistake in getting your stove repairs from Smith. No fit, no pay. Come around Stock Sales Day, I will be parked at the corner of Court and Fifth streets, and let us get together, talk it over.

Yours for more service, and less expense.

SMITH'S FIXIT SHOP
Phone 663

Fulton, Mo.

An Appeal to the Thrifty Housekeeper.

tains statement of the cost of rebuilding.

From the names of those who call at his shop or telephone to him, Mr. Smith has prepared a mailing list and it keeps changing all the time, naturally.

His letter head contains the information that he "repairs stoves,

Stove Repairing

There is as much logic in allowing your stove or range to go to pieces, throwing it away, buying a new one for the want of repairs, as to allow your house to run down.

You would not consider discarding your house because the roof was leaking. Any one or more parts of your stove or range can be replaced with new, including the sheet steel bodies.

Will not be down in town stock sales day owing to rush of business. Call by the shop and let us talk it over. Let me prove money for stove repairs is well spent.

The above applies to oil stoves also.

We supply water fronts, water backs and steel and cast bodies for steel ranges, coal heaters, wood heaters and cast stoves.

Wood heaters and refrigerators re-lined.

Oil stoves cleaned.

Phone orders carefully filled.

SMITH FIXIT SHOP

Phone 663.

Soliciting Oil Stove Repairing.

cleans oil stoves, does sheet metal work and sells parts for any kind of a stove, but he writes in his letter that he does not repair furnaces and does not carry repairs for them.

Note in the small advertisement that he carries in stock repairs, wicks and inside chambers for over 200 different makes of oil stoves.

The chance for the greatest volume of trade lies in the big middle class. Go after the exclusive, wealthy class of trade if you like, but don't figure on building big on that basis.

Have You Submitted a Slogan That Will Fit the Sheet Metal Contracting Business?

You Have But Until December 1st To Do So—Make It Short and Snappy.

BACK in its September 27th issue AMERICAN ARTISAN carried an announcement of the opening of the Sheet Metal Slogan contest which is being conducted by the Slogan Committee of the National Association of Sheet Metal Contractors, and closes December 1, 1924.

The purpose of the contest is to produce a slogan which will effectively place sheet metal products before the public.

The slogan must be short and expressive of the serviceability, economy and safety to be gained by using sheet metal products.

The following are the rules by which the slogan writer must be governed:

Twenty-five dollars cash prize for the best slogan as selected by the Slogan Committee for the National Association of Sheet Metal Contractors of the United States.

The slogan must be as short as possible.

Slogan should be mailed to N. A. Lichy, Box 2474, Waterloo, Iowa, Chairman, Slogan Committee.

Write or print slogan plainly. Sign name and address plainly.

The slogan should express the lasting or wearing qualities or other advantages of the use of sheet metal, so it may be used in advertisements like other tradesmen's slogans. For example, the paint people's (Save the Surface and You Save All); the florists' (Say It with Flowers), and the tailors' (Made for You).

Anyone may enter this contest. Anyone may send more than one slogan.

In case two slogans, identically the same, are received, only the first of such received by the Chairman will receive consideration.

This contest will close December 1, 1924. All slogans must be in the

hands of the Chairman before December 1, 1924.

The cash prize of \$25.00 will be awarded as soon thereafter as the committee can make the selection.

The Buckeye Bender Will Pay for Itself in a Short Time.

The Buckeye Bender is a handy tool that has recently been placed on the market by the J. M. & L. A. Osborn Company, Ohio's most prominent supply house for sheet metal and furnace contractors.

The representative of AMERICAN ARTISAN to whom the Buckeye Bender was demonstrated during a recent visit to the fine sample room of the Osborn company in their new offices, Superior Avenue and 38th Street, Cleveland, is of the opinion that not only is this a very useful tool, but that it will soon pay for itself, because it can be used for so many shapes of steel. It will bend



The Buckeye Bender.

flat and round bars and notched angles up to 90 degrees, having a capacity of $\frac{1}{4} \times 2$ inches in soft steel.

The Bender, which is shown herewith, is easily adjusted to various thicknesses, the material being held in place by means of an eccentric, thereby making a true bend certain. For short bends an adjustable drop gauge is included with the outfit. The weight of the machine is 55 pounds and the list price is \$40.

The example of a government determines the morals of its citizens, and the example of an employer is imitated by his employee.

Here's One of the Ways Michigan Sheet Metal Contractors' Association Is Helping Its Members and the Industry.

The Spirit of the Advertisement Should Be Incorporated Into All Individual Advertising.

THREE are two ways that a man may advertise his business.

First, where he advertises price alone and hopes to build up a successful business on that basis — which, of course, cannot be done, as it only begets for the store the name of cheap in capital letters.

Secondly, he may advertise his product and services in such a way as to render a real service. He puts his customers next to the best method of doing some specific thing so that when the job is done it is done for keeps.

By so doing that man builds confidence in himself and his business, he wins the reputation of being a first-class workman and a credit to the community which he serves. Then, too, in addition to all this, he is paying off the debt which Theodore Roosevelt said every man owes to the industry of which he is a part.

An example of the second class of advertising alluded to heretofore is found in the advertisement shown herewith.

Although this advertisement is that of an organization and not of an individual, the individual can very easily pattern his own copy after this, changing it only insofar as is necessary to meet the needs of an individual.

The particular advertisement shown was taken from the *Michigan Architectural Engineer*. It is in effect advertising a principle as well as a material.

The sheet metal industry needs more of this type of advertising. Building contractors and architects, who are in a position to specify the materials to be used for cornices and roofing, are the men that must be sold on using sheet metal in preference to other competitive substitutes before the industry can grow and develop. Sheet metal—the product of merit with economy and safety thrown in—must and will eventually triumph over other materials and the quicker the sheet metal men learn how to get their products before the architects and the public, the sooner will that triumph be.

Take a tip from the advertisement shown and get behind the industry that is giving you and yours a livelihood.

Advertising will work for you if you will let it.

Notes and Queries

Trade School.

From J. J. Herlick, Wimbledon, North Dakota.

Where can I take a course in plumbing and heating?

Ans.—St. Louis Technical Institute, 4543 North Clayton Avenue, St. Louis, Missouri, and Northern Institute, 5713 Euclid Avenue, Cleveland, Ohio, give heating courses. You can take a plumbing and heating course at the Citizens' Committee to Enforce the Landis Award School, 500 South Throop Street, Chicago, Illinois.

Van Evera and Louis Ranges.

From Otto R. Schultz Hardware Company, 155 North Vermilion Street, Danville, Illinois.

Will you kindly inform us who now has the patterns for the ranges formerly owned by the Van Evera and Louis Manufacturing Company of Chicago, Illinois?

Ans.—So far as we know, these patterns have been destroyed. However, repairs can be had from the Northwestern Stove Repair Company, 654 West Roosevelt Road, Chicago, Illinois.

Address of Illinois Roofing Company.

From F. J. Feuerbacher, 111½ North Flores Street, San Antonio, Texas.

Can you tell me where the Illinois Roofing and Supply Company is located? It is my impression that they are in Chicago.

Ans.—We have no record of the Illinois Roofing and Supply Company, but there is an Illinois Roofing Company at 2640 Lincoln Avenue, Chicago.

Address of Kant-Break Ladder Company.

From Ludwig's Sheet Metal Shop, Chillicothe, Illinois.

Will you please give us the address of The Kant-Break Ladder Company?

Ans.—Ninth and Monroe Streets, St. Louis, Missouri.

Specify a roof that will endure as long as the building itself

Roofs of real old fashioned charcoal iron tinplate (such as Michigan Standard is) have stood the test of time on many roofs for as long as fifty years without a leak.

Nowadays, when buildings are torn down and rebuilt long before they are '50 years old, you can forget all about roof troubles if you use Michigan Standard Charcoal Iron Tin Plate.

Remember this isn't a new tinplate, but the good old-fashioned kind, given a name and a trade mark for your protection.

Michigan Sheet Metal and Roofing Contractors Association



The sheet metal with a name
F. E. Ederle
Secy.
1121 Franklin St.
Grand Rapids, Mich.

Sheet metal cornices
cost less, look better
and are positively
safe.

One of the Phases of Help Which the Michigan Sheet Metal Contractors' Association Is Extending to Its Members.

Electrical Coffee Percolators, Chafing Dishes and Silver Ware Make Splendid Window Displays.

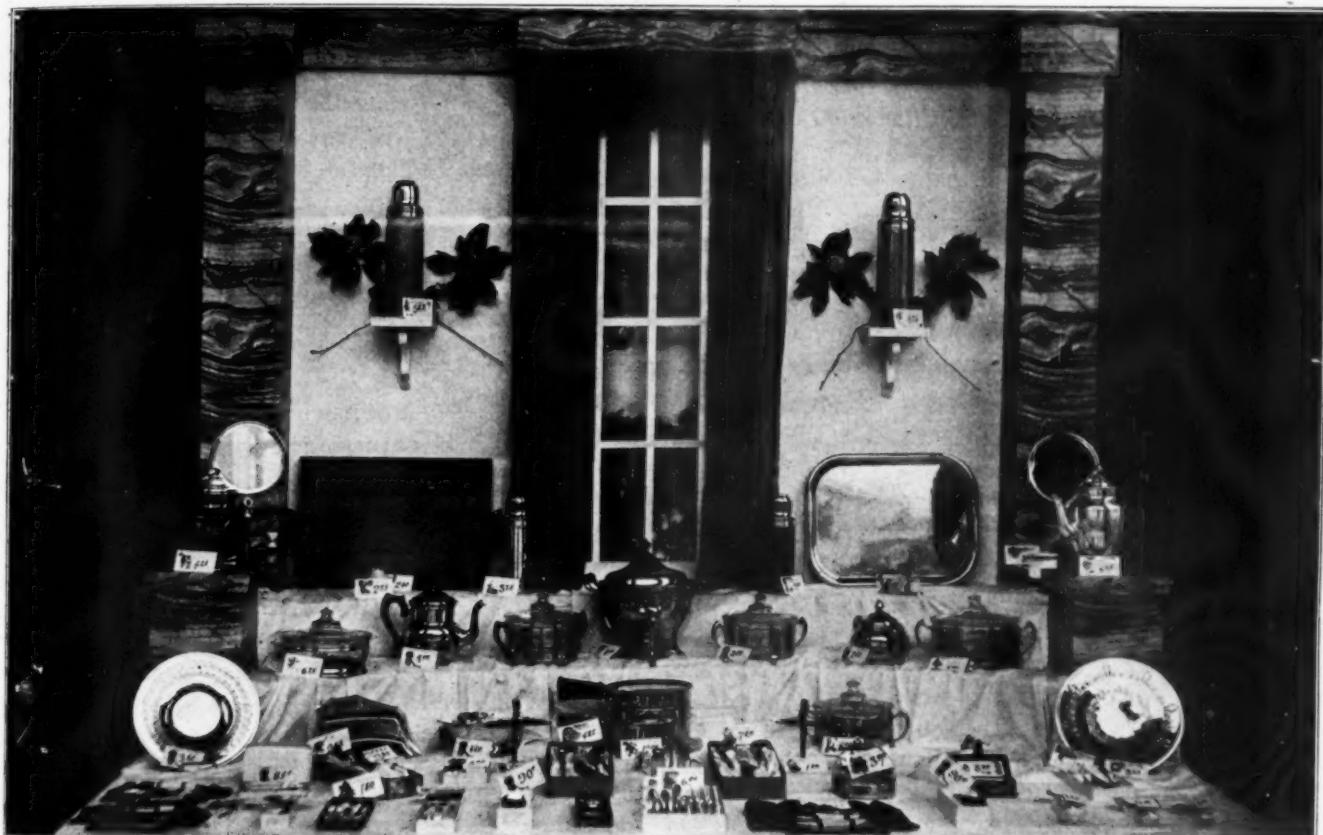
Price Tags Dispel the Notion that Gifts Are Expensive in Store Window of Steele & Torrance Company.

ORNATENESS is desirable in a window display. However, care must be taken to insure at least 95 per cent attention to the goods displayed. Many a window trimmer or advertisement builder has spent hours upon perfecting a brilliant window display or advertise-

constructing the window display shown herewith, in arranging the purely decorative material so that it would first attract attention and then reflect it to the goods on display instead of absorbing it into its own fabric.

On a level with the eye and in

The display has a distinctive and aristocratic air about it which would tend to create the impression that the prices were somewhat high. But the price tags affixed to the articles dispels any such leanings, making on the whole a very compact, decorative, interesting, and



Window Display of Electrical Cooking Utensils Arranged in an Interesting and Action Compelling Manner, Designed as a Christmas Gift Display.

ment only to find, when completed, that his handiwork drew exclamations of Ahs and Ohs a-plenty from the passers and readers, but made no sales. It is very well to put in a good-will window occasionally, but the of a store is to make turnovers of stock, to create sales as rapidly as possible and with as little effort as possible without diminishing the service to the customer.

The window trimmer for the Steel & Torrance Company, Inc., succeeded to a high degree when

the background are placed two flaming red poinsettias. The two thermos bottles reflect the light from the two side wall rosettes. These aim to attract the eye of the passer.

Directly beneath these we see two large platters, which also reflect light and attract attention.

With a sweeping motion the eye travels from background downward to the main display.

Here prices are placed upon all articles shown which produces the action favorable to the store owner.

above all, action-compelling window display.

How to Use Vacant Store Windows to Show Articles.

It has been a maxim among keen merchants for years that an empty store premise next door is worse than a competitor. Looking through dirty windows into dusty, cluttered premises is an act not conducive to the buying mood. Nobody's spirits rise at such a sight. Then, too, peo-

ple who buy next door as a class are likely to make good prospects for one's own store. If there is no "next door," this source of patronage is eliminated.

An enterprising store recently put on a big sale. Next door was not one display window, but several display windows, of an empty store building. There was a hundred feet or so blighting, cheerless window space.

This store made the windows help

its sale. It talked to the owners, and made an arrangement to use window space to advertise its sale at the store. Arrows and specific admonitions told the passing crowd where the sale was being held and the merchandise could be obtained.

The vacant premises were made to advertise the sale in a very effective way, and the fact that the sale was actually very successful was due, in small part, at least, to this piece of advertising keenness.

Window Display Space Has a Definite Determinable Value—How Do You Measure It?

Enter Your Display Photographs in American Artisan Window Display Competition and Learn Where You Stand.

THE location of the retail hardware store is all-important in so far as the potentialities of the window display are concerned. Stores located on side streets must rely more on the personal solicitation method of selling than upon the window display for the simple reason that less people are passing the side street store.

Window displays are divided into three classes. The still window, the mechanical action window and the personal demonstration window.

Each one of these types has its special use; that is, there is no better way to display a group of vacuum cleaners than by the personal demonstration method. On the other hand, the only possible way to effectively display a washing machine is to show it in action. This is so because the time in which the display has the attention of the passer-by is so short and the display has so much to do that any still display would not get the idea across.

Few women are impressed to the point of making comparisons at the sight of a washing machine in a window. The window display has got to suggest a service which the woman viewing does not at the time enjoy.

You have doubtless made many of these three types of window display. Of the ones which you thought represented your best work you

doubtless had photographs taken.

You will make many displays between now and the Christmas holidays. These windows will also represent your best work.

In order to make a permanent record of these displays, take a snapshot of them for your files. Then write a description of as many as you like and enter them in AMERICAN ARTISAN AND HARDWARE RECORD window display competition. Place a card in your file indicating that you have sent the displays to be entered in the competition. Then if you request us to return them after we are through with them, we shall gladly do so.

But whether you establish the file or not, don't neglect to send us one or more of the photographs to be entered in AMERICAN ARTISAN AND HARDWARE RECORD window display competition.

The prizes to be given are: First, \$50; second, \$25; third, \$15; fourth, \$10, paid in cash to the winners of the contest as soon as photographs are judged.

The photographs, together with descriptions of how the window displays were arranged and the materials used, may be sent by mail or express, charges prepaid, and must reach this office not later than January 31, 1925.

Each photograph and description must be signed by a fictitious name

or device and the same name or device must be placed within a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph. Contestants may enter as many window displays as they desire.

AMERICAN ARTISAN AND HARDWARE RECORD reserves the right to publish all photographs and descriptions submitted in this competition.

A competition committee of three will be appointed, one of whom will be an expert window dresser and one an experienced hardware man. This committee will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the senders, and will decide the winners of the contest.

How About a Little of the "I Use It Myself" Argument?

Ever stop to think that the above is one of the most persuasive sales arguments you could possibly use—particularly with auto accessories?

It is. For example, when a motorist comes into your store on a rainy day, is your car or delivery truck out in front equipped with the type of chains, windshield cleaner, etc., that you are urging your customers to use as a safeguard against the treacherous roadways, slippery streets and blinding rainstorm?

If not, why not?

Keeping Customer Confidence of Importance in Retail Salesmanship.

Keep the confidence of the customer. The most important phase of retail selling is not making the sale, but keeping the customer's confidence.

If the salesman inspires confidence, what happens? Just this, the customer goes away convinced that he has made the best purchase possible for the money. He comes in contact with other people. They talk it over. The customer is still further confirmed in his belief that he has made the best possible pur-

chase. He uses the article. What the salesman said about it proves to be true. The article performs its function as represented. The salesman has made a friend for life. That friend tells his friends and a good will is built up better than any advertising could do it.

On the other hand, let the customer find out that the salesman did

misrepresent the goods with meaningless sales talk and the publicity which the store receives will not be abated, but it will be of the kind which does not build better business.

So the importance of keeping customer good will is uppermost in importance in the work of the salesman.

Unwise Buying Responsible for More Legitimate Failures Than Any Other Cause.

Proper Turnover More Important Than Mere Volume in Successful Merchandising.

THERE is a popular feeling that volume is necessary to the success of a business, says J. H. Tregeoe, executive manager, National Association of Credit Men. As usual, a simple statement like this needs qualifications. Volume must be obtained without affecting equally important principles in a successful business. The objective of a business should be service, honest operations and profits. A business may run for a long while, but not permanently if the third object is alone preserved; its lot is doubtful if the first two only prevail.

A proper turnover is more important in successful merchandising than merely volume. Volume may be obtained by increasing the stock of merchandise beyond safe capital ability or by having too large a proportion of sales on credit terms.

There is no doubt that in the list of really honest failures the most common cause of trouble is unwise buying. Take, in illustration, this situation: A retail establishment with a stock of \$25,000 whose volume of sales for the year should be \$100,000. If a gross profit of 30 per cent is calculated, this means that purchases of \$70,000 should be made throughout the year, and according to seasonal demands. A volume of sales amounting to \$100,000, according to this formula, would mean a stock turnover of four times in the year, based on sales and not the purchase price. If, on the other hand, in order to sell \$100,000 dur-

ing the year, this establishment were to buy \$90,000 in merchandise, we realize quickly how largely the stock would be added to and the payables increased.

It would seem axiomatic of successful merchandising that a proper turnover be sought rather than mere volume of sales. This is one of the points of business management that has been too lightly regarded and too little recognized by merchants. It is the custom usually to set a mark for sales and to reach that mark willy-nilly. In reaching that mark, receivables may mount up too largely, the stock of merchandise may increase too rapidly, payables may inconveniently accumulate, and the last stage will be found far worse than the first. Every credit executive should be alert to this important feature of successful merchandising. In scanning financial statements he should look carefully to the proportion of stock to sales. He should discover whether a proper turnover or mere volume was the merchant's objective.

It can be made a principle of credit departments that unwise buying is responsible for more of the legitimate failures than any cause so far discovered.

When the boss introduces a new method, a new fixture, a new line of merchandise, talk it up enthusiastically and show him that you, for one, are ready to help make it work out successfully.

Mr. Dodd Has Published Instructive Booklet on Small Store Advertising.

Every man who sells at retail—whether it be kitchen utensils, garden tools, men's socks or anything else—will do himself a good turn by writing to Alvin E. Dodd, Manager of the Domestic Distribution Department of the United States Chamber of Commerce, Washington, D. C., for a copy of his booklet entitled "Small Store Advertising," a copy of which has just been received.

Profusely illustrated, the booklet goes into detail about the essentials of what the small store may do to advantage in an advertising way: how much to spend; frequency; type faces; borders; media; follow-ups; mailing lists, etc.

Other booklets published by the Domestic Distribution Department of the United States Chamber of Commerce, copies of which may also be obtained from Mr. Dodd, are, "Retailers' Expenses" and "Merchandise Turnover and Stock Control." They will be found to contain valuable and helpful information for any retail merchant.

A Pointer on Using High-Handed Methods in Collecting Time Payments.

A store advertises a budget payment, a time payment or in every day jargon, installment system of receiving payment for commodities sold. This store builds up a clientele on the time payment basis. It has records of payments made by a large number of people over a long period of time. Some people make the payments promptly on the date set down in the agreement; some procrastinate slightly, but do make the payments with interest before the month is out.

Is the firm justified in bringing pressure to bear on the delinquents before more than two days have elapsed? Yes and no. Yes where the record of the delinquent shows himself to be a procrastinator and no when the record shows the late

payments to have been made not later than one week after the date agreed upon. The date agreed upon may fall in the middle of the week, whereas the customer's pay day may come at the end of the week. Should he receive a bill for the amount due on the due date and another in a day or two after that date, he is apt to bear an ill will against the store which there was in reality no need to engender.

Discretion is the better part of valor, and the credit man should always let his records of performance guide him when anticipating the use of high-handed methods in making collections.

When the customer is paying interest at the legal rate, in addition to making the regular payments, he has a right to some consideration, especially when through performance he has shown good faith.

Coming Conventions

Mid-Year Meeting of the National Warm Air Heating and Ventilating Association and Dedication of the Warm Air Heating Research Residence, Urbana, Illinois, December 2, 1924. Allen W. Williams, Secretary, Columbus, Ohio.

Western Warm Air Furnace & Supply Association, Meeting, Sherman House, Chicago, December 4 and 5. Secretary John H. Hussie, 2407 Cumming Street, Omaha, Nebraska.

Western Retail Implement and Hardware Association Convention, Kansas City, Missouri, January 13, 14, 15, 1925. H. J. Hodge, Secretary, Abilene, Kansas.

Kentucky Hardware and Implement Association Convention, Jefferson County Armory, Louisville, week of January 18, 1925. J. M. Stone, Secretary-Treasurer, 200 Republic Building, Louisville.

Texas Hardware and Implement Association Convention, Dallas, Texas, January 20, 21, 22, 1925. Dan Scoates, Secretary-Treasurer, College Station.

West Virginia Hardware Association, Convention and Exhibition, Clarksburg, January 20 to 23, 1925. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio.

Missouri Retail Hardware Association, Convention and Exhibit, Hotel Statler, St. Louis, January 26 to 28, 1925. F. X. Becherer, Secretary, 5106 North Broadway, St. Louis.

Indiana Retail Hardware Association, Convention and Exhibit, Cadle Tabernacle, Indianapolis, January 27 to 30, 1925. G. F. Sheely, Secretary, 911 Meyer-Kiser Building, Indianapolis.

Mountain States Retail Hardware Association, Convention, Denver, Colorado, January 27 to 30, 1925. W. W. McAllis-

ter, Secretary, P. O. Box 513, Boulder, Colorado.

Indiana Sheet Metal Contractors' Association, Convention, Lafayette, February (dates not decided). Leslie W. Beach, 1136 Main Street, Richmond.

Oklahoma Hardware and Implement Association Convention, Masonic Temple, Oklahoma City, February 3, 4, 5, 1925. Charles L. Unger, Secretary-Treasurer, Oklahoma City.

Nebraska Retail Hardware Association Convention and Exhibition, Omaha, February 3, 4, 5, 6, 1925. Convention headquarters, Rome Hotel. Exhibition, City Auditorium. George H. Dietz, Secretary, 414-419 Little Building, Lincoln.

Wisconsin Retail Hardware Association Convention and Exhibition, Auditorium, Milwaukee, February 4, 5, 6, 1925. P. J. Jacobs, Secretary-Treasurer, Stevens Point.

Ohio Hardware Association, Convention and Exhibition, Columbus, February 10 to 13, 1925. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio.

New York State Retail Hardware Association Convention and Exposition, Buffalo, February 10, 11, 12, 13, 1925. Headquarters, Hotel Statler. Exposition at the Broadway Auditorium. John B. Foley, Secretary, City Bank Building, Syracuse.

Iowa Retail Hardware Association, Convention, Savery Hotel; Exhibit, Armory, Des Moines, February 10 to 13, 1925. A. R. Sale, Secretary, Hardware Building, Mason City, Iowa.

North Dakota Retail Hardware Association Convention (place not yet selected), February 11, 12, 13, 1925. C. N. Barnes, Secretary, Grand Forks.

Montana Implement and Hardware Association Convention, Helena, February 13, 14, 1925. A. C. Talmage, Secretary-Treasurer, Bozeman.

Pennsylvania and Atlantic Seaboard Hardware Association Convention and Exhibition, February 16 to 20, 1925, at Philadelphia Commercial Museum. Sharon E. Jones, Secretary, 604 Wesley Building, Philadelphia.

Illinois Retail Hardware Association Convention and Exhibit, Hotel Sherman, Chicago, February 17 to 19, 1925. Leon D. Nish, Elgin, Illinois, Secretary.

Minnesota Retail Hardware Association Convention, St. Paul Auditorium, St. Paul, February 17, 18, 19, 20, 1925. C. H. Casey, Secretary, Nicollet Avenue and Twenty-fourth Street, Minneapolis.

New England Hardware Dealers' Association Convention and Exhibition, Mechanics' Building, Boston, Massachusetts, February 23, 24, 25, 1925. George A. Fiel, Secretary, 10 High Street, Boston.

South Dakota Retail Hardware Association, Exhibit, Coliseum, Sioux Falls, February 24 to 27, 1925. C. H. Casey, Secretary, Nicollet Avenue and 24th Street, Minneapolis, Minnesota.

Michigan Retail Hardware Association Convention, Grand Rapids, February 24, 25, 26, 27, 1925. Hotel headquarters, Hotel Pantlind. A. J. Scott, Secretary, Marine City.

Arkansas Retail Hardware Association Convention, Little Rock, May, 1925. L. P. Biggs, Secretary, 815-816 Southern Trust Building, Little Rock.

Southeastern Retail Hardware Association Convention and Exhibition, Birmingham, Alabama, May, 1925. Walter Harlan, Secretary-Treasurer, 701 Grand Theater Building, Atlanta, Georgia.

National Retail Hardware Association, Philadelphia, June, 1925. H. P. Sheets, Secretary, Indianapolis.

National Association of Sheet Metal Contractors, Atlanta, Georgia, June, 1925. E. L. Seabrook, Secretary, 608 East Chestnut Street, Philadelphia, Pennsylvania.

Retail Hardware Doings

California.

The Eugene W. Boyd hardware store of Inglewood has opened a branch store at Hawthorne at the corner of Bellevue and Prairie Avenues. A. G. Spillman, who has been associated with Mr. Boyd for many years at the Inglewood store, will be in charge of the Hawthorne store.

Illinois.

The partnership of Behen & Hostetler, hardware dealers at Lovington, has been dissolved, and in the future the business will be conducted by Mr. Hostetler.

Iowa.

Osborn Brothers hardware store of Pierson have purchased a block of stock in the Winchester Repeating Arms Company and will from now on be known as a Winchester store.

Kentucky.

The partnership heretofore existing between Frank P. Lowry and C. B. May, hardware dealers at 316 Main Street, Paris, has been dissolved, Frank P. Lowry continuing the business.

K. C. Mason has purchased the stock of the Orndorff Hardware Company at Adairville.

Michigan.

William E. Clark, for several years with the Sprague Hardware Company, West Main Street, Kalamazoo, has opened his own store at North Burdick and North Streets.

Missouri.

A deal has been completed whereby H. T. Eads became the sole owner of the Meta Hardware Store at Meta. He bought the half interest of his partner, V. M. Overturf.

The stock and fixtures of the Billings Hardware Company has been purchased by W. A. Fallin of Springfield.

Montana.

Frank J. Strecker, manager of the Golden Rule store at Conrad, has purchased the interest of his brother, Owen E. Strecker, in the Strecker Hardware and Furniture Company.

South Dakota.

Harold Hanson has taken over the Johnson Hardware Store at Alsen.

J. E. Street has purchased a hardware store at Wall.

The Statsman Hardware Store at Naper has been sold to Jim Wright.

Texas.

The H. B. Francis Hardware Store, 313 Houston street, Fort Worth, has been purchased by C. C. Clark and Howard Milton.

John E. Quarles Company have moved their hardware store at Alvord to their new building just across the street from the depot.

Carter and Sessions are having a new hardware store erected south of the railroad at Millsap.

Market Analysis Should Precede Stove Merchant's Newspaper and Direct-by-Mail Advertising.

Government Statistics Show Incompetency Responsible for 34.2 Per Cent of Failures in 1922.

ANALYTICAL statistics for the year 1922 show that only 1.1 per cent of the business failures in the United States resulted directly from competition.

On the other hand, incompetence caused 34.2 per cent of those failures.

Unwise credits was responsible for only 1.3 per cent of the total business failures, while lack of capital resulted in 30.8 per cent.

Inexperience took its toll of 4.7 per cent, whereas speculation took only .3 per cent, and actual fraud took 3.7 per cent.

What do these percentages signify to the retail stove merchant? They signify that by far the greatest cause for loss of business lies with the retail merchant himself; namely, his incompetence or his unwillingness to go out after business.

Competition—mail order or otherwise—the lazy man says is sucking the life blood of his business without his being able to do anything about it. Yet the government figures brought together from reliable sources by competent statisticians prove that competition only took a toll of 1.1 per cent of the total number of business failures during 1922. These averages hold throughout the entire business fabric, taking in all forms of industry.

The retail merchant's next greatest howl is that credits are bad, and still the figures for 1922 show that only 1.3 per cent of the failures were caused by the granting of credit unwisely.

Thus one after another the props used by the lazy man to bolster up his claim that business is going to the dogs are knocked out from under him.

When the final reckoning comes he hasn't a leg to stand on. He must admit that his own lethargy is

responsible for the rotten state of his business.

To sell stoves he has got to get out among his clientele, determine who are the immediate prospects and when the others will be prospects, then direct his sales energy where it will do the most good. In this way he wastes no time, neither does he dissipate his capital in fields upon which the application of fertilizer only causes weeds to grow. He makes a hit with every shot and in this way reduces his per unit cost of distribution. With a reduction of distribution costs comes an increase in profits.

The value of proper market research cannot be overestimated. Of what avail to compile extensive mailing lists indiscriminately? The resultant per unit waste from this method is too great to warrant its continued use. Prospect lists to be of value must contain such potentialities that salesmanship can bring to a fruition. Such lists cannot be gained without hard work.

Advertising plays a vital part in the retail stove merchant's selling procedure, but of what avail to advertise until proper market research has shown where to fire the shots?

Who Pays for Advertising Which Does Not Pay for Itself?

An interesting discussion has been going on in the advertising press. Somebody asked the question, "Who pays for the advertisement that doesn't pay for itself?" and the cat was on the stove.

Some of the best known advertising men in the country essayed an answer, most of them answering in a different way.

It has been said that when doctors disagree the patient dies. This is not always true. Sometimes when

doctors disagree they are all driven out of the sick-room and the patient quickly recovers.

But to the question and our answer. The advertisement that does pay pays for the advertisement that doesn't pay for itself—just as the workman who does more than he is paid for helps to pay the wages of the workman who does less than he is paid to do, or the profits made on salable merchandise pay the losses sustained from the manufacture of less salable numbers.

The advertiser who views this question and answer from our angle will, we believe, be less discouraged when he finds that a particular advertisement has not paid and will charge the deficiency to the next advertisement that not only pays for itself, but also pays the balance due from the delinquent one.

Having a Regard for Actual Anticipated Demand Before Placing Orders.

Place all order for merchandise in good faith.

No one can say how far the duplication of orders with the expectation of cancelling all or a part of them before delivery was responsible for the collapse of business and industry in 1920-21.

It is true, however, that such a policy on the part of retail merchants creates a phantom demand the extent of which the manufacturer has no way of determining. The result is that the latter makes a wild scramble to speed up production in an effort to meet the supposed demand only to find later that he has tied up in unsalable products money which he cannot release.

Under no circumstance should the retail merchant order beyond the anticipated needs, in the expectation of cancelling a part or all of the order at a later date.

In fairness to industrial progress and to the manufacturers the retail merchant should place his orders intelligently and with due regard to the actual anticipated demand.

Do you know your costs?

Let Market Research Help You to Direct Your Advertising Into Correct Channels.

More Goods Will Be Sold and the Per Unit Cost of Your Advertising Will Be Lessened.

MANY hardware men have grasped the special sale idea used by department stores to draw trade on days when selling is slow.

Every merchandiser knows that habit has a strong governing power

In ads of this type two prices must be given, otherwise the sale is robbed of its fourth dimension—that of producing immediate action.

We note in this advertisement also the effect of using fractions of

in their own way. They are, particularly in this freedom-loving country, adverse to doing something just because somebody else tells them to.

There is a way, however, that these same liberty-loving folks can be made to comply with your wishes. The advertisement is your tool and auxiliary in this work of making a freedom-loving people spend their money in your store.

This auxiliary demands attention, however. It is niggardly about doing its work until it has been patted into the proper humor. It must be made to see that it is really doing a

Specials for Monday

Medicine Cabinets



All steel, beautifully designed medicine cabinets in white baked enamel with beveled plate mirror.

Special
\$4.98
Regular Price
\$6.00

Coal Hods

Get one or more of these handy open coal hods, made of galvanized iron.



Regular Price 85c

Special
Price
59c

Casseroles

Brass Frame
Nickel-Plated
Genuine
Pyrex
Insets
Special

\$1.98

Percolators

This is not a so-called cheap percolator, but a Manning & Bowman cold water valve percolator that will make perfect coffee ready to serve before the water reaches the boiling point.



Special \$3.98
Regular Price \$4.95

WEEKS HARDWARE CO.

19-121

FIRST

WASHINGTON AVE.

over most people. They also know that for most women in the smaller towns Monday morning is wash day irrespective of weather. They know, too, that some strong inducement must be given these women to make them do any shopping at all on Monday.

The accompanying advertisement of the Weeks Hardware Company, taken from the *Scranton Pennsylvania, Republican*, is a good representative of the type of ad mentioned heretofore.

a dollar, making the reduction look even larger than it is.

There are, however, substantial reductions in all of the items shown and most any woman would be willing to rearrange her shopping program for the week with such inducements.

* * *

The advertisement of today must render a service; it must pay for its keep by bringing customers to the store. Unfortunately these prospective buyers like to spend their time

SMITH HARDWARE

General Hardware

Plumbing

Heating

—and—

Sheet Metal Work

99-101 Fraley St.

service for the people, before it will unbend and do its work in the proper manner.

The accompanying advertisement of the Smith Hardware, taken from the *Kane, Pennsylvania, Republican*, verges upon the passive type. It would make an excellent permanent overhead sign. The border is also too heavy.

SHEET COPPER

FOR ROOFING and CORNICE WORK

ALSO

SPECIAL COLD ROLLED RESQUARED STRIP

Ideal for Conductor, Gutters, Valleys, Flashings,
Gravel Stops, etc.



MERCHANT & EVANS CO.
PHILADELPHIA

NEW YORK

CHICAGO

CLEVELAND

KANSAS CITY

DETROIT

WHEELING

VENTILATORS

We carry a full line of the below named well known ventilators:

EARLE	IWAN'S	"ROYAL"
PERFECTION	STANDARD	GLOBE
HERCULES	"STAR"	UNO
AMERICAN-LARSON	"BEST"	

We can make prompt shipments on your orders for anything in the sheet metal line.

Try us—write for catalog today

BERGER BROS. CO.

229 to 237 ARCH STREET
WAREROOMS AND FACTORY: 100 TO 114 BREAD STREET
PHILADELPHIA, PA.

**"Durable
All the Way,
Through"**

INLAND

COPPER ALLOY
STEEL SHEETS

INLAND STEEL COMPANY

36 South Dearborn Street, Chicago

Branch Offices

Milwaukee St. Paul St. Louis

Mills at

Indiana Harbor, Ind., Chicago Heights, Ill., Milwaukee, Wis.

THE STANDARD



Ventilator

IS of the rotatable type and swings absolutely free in the slightest draft. The construction is scientifically correct and unusually strong. It works perfectly in all kinds of weather and handles 50% more air than stationary ventilators of equal size. Order from your jobber. Write for our catalog and prices today.

Manufactured by

STANDARD VENTILATOR CO.
LEWISBURG, PA.

Memorial Monuments

Write for Prices and
Illustrations

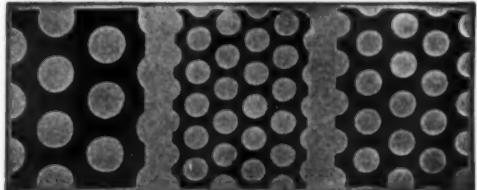
Gerock Bros. Mfg. Co.
Sheet Metal Ornaments
and
STATUARY

1252 So. Vandeventer Ave.

St. Louis, Mo., U. S. A.



PERFORATED METALS



All Sizes and Shapes of Holes

In Steel, Zinc, Brass, Copper, Tinplate, etc.

For All Screening, Ventilating and Draining

EVERYTHING IN PERFORATED METAL

THE HARRINGTON & KING PERFORATING CO.

5649 FILLMORE ST.—CHICAGO, ILL. U. S. A.
NEW YORK OFFICE, 114 LIBERTY ST.

Republican Victory Pushes Shadow of Political Quackery From Business Horizon.

Effect Reassuring to Business Enterprise and Investment Capital — Non-Ferrous Metals Advance.

GRADUAL and deliberate improvement in the steel industry continues. The United States Steel Corporation is operating around 68 per cent of capacity, an increase of 3 per cent in the last week and the highest point for several months.

"The election result has stimulated the iron and steel markets," the *Iron Age* says. "No rush of buying was looked for and none came, but there is greater activity and it is more marked in the Chicago district than elsewhere. In pig iron the movement, well under way before November 4, has broadened and total sales are put at 600,000 tons."

This increasing demand for pig iron, coupled with firmer prices for both pig iron and finished steel, is the traditional way in which expansion in the basic steel industry begins.

Copper.

Electrolytic copper advanced $\frac{1}{4}$ cent in the week to November 11. Producers have been well sold and therefore have been content to book moderate tonnages, then push their prices up another peg.

For a week export buying was relatively slow, when the rise in sterling exchange put London price equivalents up and buying was renewed for British account. Some copper sold as high as 14.00 cents November 13.

Tin.

Tin prices have risen above 54 cents on the tide of rising sterling exchange, coupled with the bull operations of London factors. American consumers have maintained a rather cautious attitude, but the increase in tinplate business in this country and the fact that the market is in a stronger statistical position than at any time in six years are combining to make sentiment more bullish than ever.

Lead.

The lead market has continued an irregular and nominal affair, due to the efforts of the larger factors in the industry to check the runaway market.

While outside sellers have quoted up to 9.25 cents, New York, and made sales at 9.12 $\frac{1}{2}$ cents, New York, the largest factor in the east has done some business at 8.65 cents, New York.

Similarly, in the west, sales have been made at 8.85 cents, whereas a leading producer has quoted December out at 8.40 cents. European prices have risen steadily.

Zinc.

Domestic zinc consumers have bought good tonnages.

The price of slab zinc increased another 15 points the past week to 6.75 cents, East St. Louis.

High grade zinc is quoted 8.25 cents to 8.75 cents, delivered. Brass special is commanding 2 $\frac{1}{2}$ to 5 points over prime western.

Solder.

Chicago warehouse prices on solder are as follows. Warranted, 50-50, \$33.50; Commercial, 45-55, \$32.75, and Plumbers', \$31.50, all per 100 pounds.

Tin Plate.

Business in tin plate is only about 40 per cent of what it should be for 100 per cent operating schedules.

Operations average between 50 and 60 per cent of capacity. This situation, normal for this time of the year, doubtless will prevail until late in December or until books are opened for next quarter.

The tin plate price is unchanged at \$5.50, f. o. b. Pittsburgh district mills, per base box of 100 pounds.

Sheets.

Western sheet mills are booking a good volume of business, but the

activity displayed by users of plates, shapes and bars is not paralleled in sheets. Capacity is available over the remainder of the year, although order books are lengthening slightly.

One valley maker is understood

Old Metals.

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$18.50 to \$19.00; old iron axles, \$24.50 to \$25.50; steel springs, \$19.50 to \$20.00; No. 1 wrought iron, \$14.50 to \$15.00; No. 1 cast, \$16.50 to \$17.00, all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 9 cents; light brass, 6 $\frac{1}{4}$ cents; lead, 7 cents; zinc, 4 cents, and cast aluminum, 16 $\frac{1}{2}$ cents.

Pig Iron

The pig iron market report of Rogers, Brown & Company says in part:

"The activity in pig iron buying is being well sustained and is quite general throughout the country. New England reports a fair run of orders, most of them small but some running into the thousands. It has not been expected that buying would be heavy there until the textile industry became more active."

"Pittsburgh, until recently the center of inactivity, is now reporting orders for encouraging tonnages, particularly of foundry iron for first quarter. The Valley furnaces have advanced the minimum price to \$19.50 base."

"Orders are pouring into Chicago. The price has been advanced to a \$21.00 base, with differentials of \$1.00 per ton for the higher silicon grades in place of the usual 50c. One seller has temporarily withdrawn from the market. It is expected that an additional furnace will be blown in during the week."